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**I. Summary:** This Appendix classifies *parts* within their respective *system*, *assembly*, and *coverage class* for each *plan* and optional coverage(s) outlining coverage eligibility during a *breakdown* for the *initially failed part* and any resulting *progressive damage*, for the *Members* enrolled *plan*.

**II. Initiation Periods:** To provide transparent understanding of all TruckClub™ offerings, We use one parts list that outlines initiation periods and coverage classifications for all programs:

- A. **TruckAssure™** – There is no initiation period. Parts identified with an asterisk will be non-covered for this program.
- B. **TruckProtect™ (Purchased through a Reseller)** – For parts listed with an asterisk, an initiation period of 60 calendar days and 2,500 miles (4,024 km) will apply upon the enrollment (or upgrade) of this Agreement. These parts will be considered non-covered during an initiation period.
- C. **TruckProtect™ (Purchased Directly from TruckClub™)** – An initiation period of 30 calendar days and 2,500 miles (4,024 km) will apply upon the enrollment (or upgrade) of this Agreement. For parts listed with an asterisk, an initiation period of 90 calendar days and 2,500 miles (4,024 km) will apply upon the enrollment (or upgrade) of this Agreement. These parts will be considered non-covered during an initiation period.

**III. Coverage Determination (Initial Failure and Progressive Damage):** The *coverage class* of the *initially failed part*, as listed herein for the enrolled *plan*, determines the extent of coverage for both the *initially failed part* and *progressive damage*:

- A. **System Coverage Class:** Coverage includes the *initially failed part* and any *progressive damage* to *parts* within the same *system*. There is no coverage for *progressive damage* to *part(s)* in another *system* or to another *assembly*.
- B. **Assembly Coverage Class:** Coverage includes the *initially failed part* and any *progressive damage* to *parts* within the same *assembly*. There is no coverage for *progressive damage* to the *system* or another *system*.
- C. **Part Coverage Class:** Coverage is limited to the *initially failed part* only. There is no coverage for *progressive damage* to *parts* in the *assembly*, the *system*, or another *system*.
- D. **Progressive Only Class:** There is no coverage if the *initially failed part* is listed in this *coverage class*. Coverage is only available for *parts* listed in this *coverage class* if they are one of the following:
  - 1. Within the same *system* as and *progressively damaged* by an *initially failed part* listed in the *System Coverage Class*.
  - 2. Within the same *assembly* as and *progressively damaged* by an *initially failed part* listed in the *Assembly Coverage Class*.
- E. **Non-Covered Class:** There is no coverage if the *initially failed part* is listed in this *coverage class*.



**IV. ESSENTIAL PLAN:**

**DRIVETRAIN GROUP**

**A. FRONT DRIVEN AXLE SYSTEM (021)**

- 1. **DRIVEN FRONT STEER AXLE AXLE COMPONENTS (021-001):** SYSTEM COVERAGE CLASS: driven front steer axle ball/bushing assembly, driven front steer axle axle shaft bearing, driven front steer axle differential side bearing, driven front steer axle pinion bearing, driven front steer axle planet gear bearing, driven front steer axle steering knuckle bearing, driven front steer axle pinion bearing race, differential carrier bushing, driven front steer axle bearing cage, driven front steer axle collar, driven front steer axle pinion bearing sleeve; **gear(s):** driven front steer axle primary pinion drive gear, driven front steer axle differential pinion gear, driven front steer axle planet gear, driven front steer axle differential side gear, driven front steer axle sun gear, driven front steer axle primary ring gear, driven front steer axle ring and pinion gear; **shaft(s):** driven front steer axle differential pinion gear shaft, driven front steer axle shaft, driven front steer axle left inner axle shaft, driven front steer axle right inner axle shaft, driven front steer axle left outer axle shaft, and driven front steer axle right outer axle shaft. ASSEMBLY COVERAGE CLASS: driven front steer axle oil baffle, driven front steer axle differential pinion gear thrust washer,

driven front steer axle ring cage, driven front steer axle planet gear carrier, driven front axle air chamber, driven front steer axle shift fork, driven front steer axle push rod, driven front steer axle ball shaft, driven front steer axle clutch sleeve, driven front steer axle distance sleeve; **housing/cover(s)**: driven front steer axle axle housing cover, driven front steer axle front axle shaft bearing cover, driven front steer axle breather cover, driven front steer axle differential case cover, driven front steer axle planetary gear end cover, driven front steer axle housing, driven front steer axle front axle carrier housing, driven front steer axle steering knuckle housing; **gasket(s)**: \*differential lock actuator gasket, \*driven front steer axle axle housing cover gasket, \*driven front steer axle axle shaft flange gasket, \*driven front steer axle carrier gasket, \*cv joint gasket, \*driven front steer axle drain plug gasket/seal; **seal(s)**: \*driven front steer axle axle bracket o-ring, \*driven front steer axle differential housing o-ring, \*driven front steer axle drive gear o-ring, \*driven front steer axle, \*air line, hose, tube, plumbing o-ring, \*driven front steer axle, oil line, hose, tube, \*plumbing o-ring, \*driven front steer axle planetary gear carrier seal, \*driven front steer axle front axle shaft seal, \*driven front steer axle pinion seal, \*driven front steer axle spindle seal, and \*driven front steer axle ball end seal. PART COVERAGE CLASS: \*front axle 4x4 actuator, \*differential lock actuator, CV joint, CV axle disconnect gear, CV axle intermediate shaft, CV axle support bearing, driven front steer axle CV head, CV axle shaft, CV axle support bearing cover, driven front steer axle steering knuckle, \*front axle 4x4 solenoid, driven front steer axle ring gear support hub, driven front steer axle universal joint, driven front steer axle flange yoke, driven front steer axle input yoke, driven front steer axle slip yoke, and driven front steer axle H yoke. PROGRESSIVE ONLY CLASS: driven front steer axle trunnion, \*driven front steer axle trunnion cap gasket, \*driven front steer axle trunnion grease seal, driven front steer axle trunnion thrust bearing, driven front steer axle front transaxle trunnion bushing, boot(s), disc(s), bearing distance rings, shift fork slider, housing vent, fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

**2. FRONT STEERING DRIVEN AXLE ASSEMBLIES (021-002)**: SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: N/A. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: axle housing & differential carrier assembly, axle housing and power divider assembly, front axle driven axle assembly.

**3. FRONT DRIVEN AXLE PORTAL ASSEMBLIES (021-008)**: SYSTEM COVERAGE CLASS: portal assembly output side gear, portal assembly input spur gear, portal assembly input shaft bearing, portal assembly steer axle inner output shaft bearing, portal assembly steer axle center output shaft bearing, and portal assembly outer output shaft cylinder bearing. ASSEMBLY COVERAGE CLASS: front driven axle portal assembly outer housing, \*front driven axle portal assembly input shaft dust seal, \*portal input shaft seal, and \*front portal assembly output shaft seal. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

**4. DRIVEN FRONT STEER AXLE TRANSAXLE ASSEMBLY (021-009)**: SYSTEM COVERAGE CLASS: transaxle differential carrier, transaxle differential carrier bearing, transaxle differential pinion gear, transaxle differential side gear, transaxle differential carrier bearing race, transaxle differential ring gear, and transaxle differential pinion shaft. ASSEMBLY COVERAGE CLASS: transaxle side cover, transaxle differential pinion gear thrust washer, transaxle differential side gear thrust washer, and \*transaxle side cover gasket. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: plug(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

## **B. REAR DRIVEN AXLE SYSTEM (022)**

**1. REAR DRIVEN AXLE HOUSING COMPONENTS (022-001)**: SYSTEM COVERAGE CLASS: differential carrier bushing, and driven rear axle axle support bushing. ASSEMBLY COVERAGE CLASS: **housing/cover(s)**: rear axle housing breather cover, rear axle filter cover, rear axle housing cover; **gasket(s)**: \*rear axle housing cover gasket, \*rear axle filler plug gasket, \*differential actuator lock gasket; **seal(s)**: \*air line, hose, tube, plumbing o-ring, and \*oil line, hose, tube, plumbing o-ring. PART COVERAGE CLASS: \*differential lock actuator. PROGRESSIVE ONLY CLASS: filter, vent, plug(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

**2. REAR AXLE SHAFT (022-002)**: SYSTEM COVERAGE CLASS: rear axle shaft, rear axle shaft bearing. ASSEMBLY COVERAGE CLASS: shaft dowel; **gasket(s)**: \*rear drive axle axle shaft flange gasket, \*brake drum oil deflector gasket; **seal(s)**: \*axle seal, and \*rear drive axle axle shaft flange o-ring. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: wedge, cone, plug(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

**3. DIFFERENTIAL CARRIER (022-003)**: SYSTEM COVERAGE CLASS: differential carrier, differential carrier bushing, no-spin/positraction differential cam, drive pinion shaft bearing cage, differential carrier side bearing cap, sliding clutch

collar, sliding clutch plate, differential clutch hydraulic pump, rear axle pneumatic cylinder; **bearing(s)**: tail shaft drive pinion bearing, idler planetary pinion bearing, double reduction pinion shaft bearing, differential carrier bearing assembly (cup and cone), differential carrier front drive pinion bearing assembly (cup and cone), differential carrier inner drive pinion bearing assembly (cup and cone), differential carrier outer drive pinion bearing assembly (cup and cone), differential carrier rear drive pinion bearing assembly (cup and cone), differential carrier side carrier bearing assembly (cup and cone); **gear(s)**: rear driven axle primary drive pinion gear, secondary drive gear, secondary driven gear, differential pinion gear, driven rear axle differential side gear, differential sun or sliding clutch gear, intermediate bevel gear set, driven rear axle primary ring gear, ring gear & drive pinion, driven rear axle differential gear pinion, planetary idler pinion, rear axle worm wheel; **shaft(s)**: differential pinion (spider) shaft, double reduction pinion shaft, rear axle worm shaft, and rear axle differential cross shaft. **ASSEMBLY COVERAGE CLASS**: pinion bearing baffle, differential carrier control valve, oil distributor, carrier side bearing cap dowel, yoke sleeve, ring gear thrust block, driven rear axle differential pinion gear thrust washer, driven rear axle differential side gear thrust washer, pinion shaft end yoke, integral assembly yoke & flange; **housing/cover(s)**: driven rear axle differential housing, rear axle differential case assembly, rear differential companion flange cover, differential & planetary support cover, differential case cover, differential support case cover, rear axle filter cover, carrier lock cover, differential sleeve cover; **gasket(s)**: \*differential actuator lock gasket, \*drive pinion axle flange gasket, \*drive pinion shaft bearing cage gasket, \*differential carrier cover gasket, \*differential carrier gasket, \*differential carrier gasket set; **seal(s)** \*axle pinion shaft front bearing seal, \*drive pinion shaft rear bearing seal, and \*drive pinion rear bearing retainer seal/o-ring. **PART COVERAGE CLASS**: differential lock, \*differential lock actuator, differential lock shift fork, locking differential governor, \*differential control module, \*differential temperature sending unit, \*axle temperature sensor, \*differential clutch hydraulic pump solenoid, and \*driven rear axle carrier housing indicator lamp switch. **PROGRESSIVE ONLY CLASS**: differential pinion pilot bearing, adjuster(s), oil deflector, clutch disc, guide plate, magnet, vent, plug(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

- 4. POWER DIVIDER AND INNER AXLE DIFFERENTIAL (022-004):** **SYSTEM COVERAGE CLASS**: inter-axle differential split torque, inter-axle differential lockout, inner and outer automatic lockout cam, power divider lockout cylinder diaphragm, lockout power divider shift fork, driven rear axle oil pump assembly, pump relief valve spring, pump relief valve ball, helical driven gear key, rear thru shaft (output) collar, inter-axle differential planetary gear carrier, input bearing cage, helical driven gear bushing, inter-axle case bushing, rear axle power divider output shaft bushing, power divider differential pinion bushing; **bearing(s)**: power divider cage bearing, rear output shaft bearing, power divider input shaft bearing assembly (cup and cone), power divider inner output shaft bearing assembly (cup and cone), rear side gear bearing (cup and cone), drive or driven shaft bearing cap; **gear(s)**: countershaft gear, helical drive gear, pump drive gear, helical driven gear, pump driven gear, pump driven idler gear, output shaft gear, helical pinion gear, inter-axle side gear, power divider differential spider, inter-axle differential planetary carrier hub ring gear, inter-axle differential planetary gear, inter-axle differential planetary carrier ring gear, power divider differential pinion; **shaft(s)**: lockout shift control cross shaft, input shaft and bushing, output shaft and bushing, thru shaft, pump drive shaft, pump idler shaft, and countershaft. **ASSEMBLY COVERAGE CLASS**: driven rear axle differential lock air chamber, power carrier control valve, axle housing bypass manifold, input shaft yoke sleeve, thru shaft yoke sleeve, power divider differential forward side gear thrust washer, power divider differential helical side gear thrust washer, lockout air control assembly valve, lockout power divider shift lever, rear center input shaft yoke, output shaft yoke, inter axle yoke; **housing/cover(s)**: power divider case, power divider differential case, carrier housing membrane cover, power divider case cover, pump cover, through-drive cover, inter-axle differential input cover, inter-axle differential carrier housing; **gasket(s)**: \*thruhaft (output) gasket; **seal(s)**: \*cap cover o-ring, \*input bearing cage o-ring, \*lube pump o-ring, \*driven rear axle output shaft o-ring, \*pump relief valve plug o-ring, \*differential lock switch seal, \*drive shaft cap seal, \*driven shaft cap seal, \*oil input seal, \*rear driven axle output shaft seal, \*power divider seal, and \*power divider sensor seal. **PART COVERAGE CLASS**: \*power divider differential lock sensor, and \*differential lock switch. **PROGRESSIVE ONLY CLASS**: oil filter and element, pump screen, yoke clamp plate, housing membrane, output shaft bearing lock, lockout shift clutch or sleeve, breathers, plug(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
- 5. REAR DRIVEN AXLE ASSEMBLIES (022-007):** **SYSTEM COVERAGE CLASS**: N/A. **ASSEMBLY COVERAGE CLASS**: N/A. **PART COVERAGE CLASS**: N/A. **PROGRESSIVE ONLY CLASS**: rear driven complete axle housing and differential carrier assembly, and rear driven complete axle housing and power divider assembly.
- 6. REAR DRIVEN AXLE PORTAL ASSEMBLY (022-008):** **SYSTEM COVERAGE CLASS**: planetary ring gear hub, rear hub and rotor, planetary hub gear shaft, hub grease slinger, planetary hub spindle, planetary hub thrust pin, and planetary counter piece; **bearing(s)**: portal assembly input shaft ball bearing, portal assembly output shaft outer cylinder bearing, portal assembly rear drive axle center output shaft bearing, portal assembly rear drive axle inner output shaft bearing; **gear(s)**: planetary

hub gear, output side gear, input spur gear, planetary hub spider, planetary hub pinion. ASSEMBLY COVERAGE CLASS: **housing/cover(s)**: rear driven axle portal assembly outer housing, rear drive axle portal assembly planetary hub gear cover; **seal(s)**: \*rear driven axle portal assembly input shaft dust seal, \*portal input shaft seal, and \*rear portal assembly output shaft seal. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: lock rings, plug(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

### C. TRANSFER CASE SYSTEM (025)

- 1. TRANSFER CASE ASSEMBLY (025-001):** SYSTEM COVERAGE CLASS: transfer case key, shift motor, oil pump, synchronizer, output shaft clutch piston, shift cylinder piston, shift piston bushing, bearing cage, shaft collar, planetary carrier spindle, planetary carrier thrust washer, output shaft high gear bearing race, output shaft low gear bearing race, main shaft bearing race, transfer case rod, front output shaft bearing cap, intermediate shaft bearing cap, rear output shaft bearing cap, input shaft bearing cap, front output bearing carrier, input shaft bearing carrier, rear output bearing carrier, planetary carrier; **shaft(s)**: idler shaft, input shaft, intermediate shaft, main shaft; **bearing(s)**: driven gear bearing assembly (cup and cone), input idler bearing assembly (cup and cone), input shaft bearing assembly (cup and cone), intermediate shaft bearing assembly (cup and cone), output idler bearing assembly (cup and cone), output shaft bearing assembly (cup and cone), output yoke bearing assembly (cup and cone), planetary carrier bearing assembly (cup and cone), tapered roller bearing assembly (cup and cone), front output shaft (cup and cone) bearing, rear output shaft (cup and cone) bearing, front output shaft bearing, output shaft high gear bearing, output shaft low gear bearing, main shaft bearing, planetary gear bearing, rear output shaft bearing, output shaft thrust bearing, transfer case thrust bearing; **gear(s)**: driven gear, front output shaft gear, output shaft high gear, idler gear, input shaft gear, intermediate shaft gear, output shaft low gear, pinion gear, planetary gear, rear output shaft gear, speedometer gear, sun gear, ring gear, main shaft drive sprocket, and output shaft-driven sprocket. ASSEMBLY COVERAGE CLASS: chain, fork, manifold, interlock plunger, oiler scoop, exciter ring, impulse wheel, pressure relief valve, modulating valve, output shaft clutch hub, transfer case hub, speedometer-driven gear sleeve, transfer case sleeve, adapter sleeve, clutch housing sleeve; **shaft(s)**: front output shaft, rear output shaft; **housing(s)**: output housing, clutch housing, flange housing, cylinder housing, declutch housing, output shaft clutch housing, pump housing, transfer case housing, controls cover, front transfer case cover, oil pump housing cover, idler shaft cover, idler cover, pto cover, rear transfer case cover, side transfer case cover; **gaskets(s)**: \*housing adapter gasket, \*transfer case to transmission adapter gasket, \*clutch housing gasket, \*controls cover gasket, \*idler shaft cover gasket, \*PTO cover gasket, \*electrical connector gasket, \*idler cover gasket, \*output housing gasket, \*pressure switch gasket, \*output shaft oil seal retainer gasket, \*output shaft bearing retainer gasket, \*speedometer driven gear gasket, \*transfer case gasket; **seal(s)**: \*input shaft seal, \*output shaft oil seal, \*transfer case seal, \*output yoke seal, \*clutch o-ring, \*drain plug o-ring, \*electrical connector o-ring, \*idler o-ring, \*modulating valve o-ring, \*output shaft o-ring, and \*plug o-ring. PART COVERAGE CLASS: speedometer cable, \*control module, oil cooler, \*speed sensor, shift cylinder, \*modulating valve solenoid, \*control switch, \*4-wheel drive indicator switch, \*pressure switch, and \*wiring harness. PROGRESSIVE ONLY CLASS: sliding clutch(es), diff-lock clutch collar, clutch pack disc, drain plug, clutch pack drum, clutch collar gear, clutch gear, intermediate clutch gear, shift knob, shift lever and linkage, shift rail, plug(s), auto shift control shaft coil, slider, spring(s), yoke(s), bushing(s), clip(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), adapter/flange/mounting plate(s), pipe(s)/hose(s), mounting hardware, nut(s), bolt(s), and washer(s).
- 2. TRANSFER CASE ACCUMULATOR ASSEMBLY (025-003):** SYSTEM COVERAGE CLASS: accumulator piston and cylinder. ASSEMBLY COVERAGE CLASS: \*solenoid valve, \*accumulator piston seal, and \*end cap seal. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: end cap, fitting, and bolt.
- 3. PLANETARY GEAR CARRIER ANNULUS ASSEMBLY (025-004):** SYSTEM COVERAGE CLASS: planetary gear carrier annulus. ASSEMBLY COVERAGE CLASS: N/A. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

### D. MANUAL TRANSMISSION SYSTEM (026)

- 1. TRANSMISSION CASE (026-001):** SYSTEM COVERAGE CLASS: speedometer gear, extension housing bearing, clutch housing bushing, extension housing bushing, main case bushing, tail shaft support bushing, thrust washers; ASSEMBLY COVERAGE CLASS: **housing(s)**: Bell Housing, front transmission case, rear transmission case, lower clutch housing cover, front bearing cover, hand hole cover, oil sump cover, PTO cover, shift cover, side cover, rear case cover, top case cover clutch housing, extension housing; **gaskets(s)**: \*clutch housing gasket, \*rear case cover gasket, \*extension housing gasket, \*front bearing cover gasket, \*main case front cover gasket, \*input shaft housing gasket, \*plug gasket, \*PTO cover gasket; **seal(s)**: \*front bearing cover o-ring, \*companion flange o-ring, airline/hose/tube/plumbing o-ring, \*axle flange seal, \*cover seal, \*input

shaft seal, and \*front oil seal. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: dipstick, dipstick tube, plug(s), magnet, yoke(s), bushing(s), clip(s), clamp(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), adapter/flange/mounting plate(s), pipe(s)/hose(s), mounting hardware, nut(s), bolt(s), and washer(s).

- 2. REVERSE, REGULAR COUNTERSHAFT GEARS & BEARINGS (026-002):** SYSTEM COVERAGE CLASS: reverse shaft rocker arm, countershaft cap, reverse idler cap, counter gear thrust washer, reverse idler gear thrust washer, reverse idler gear thrust bearing, countershaft 6th gear bearing, front and rear counter gear bearing assembly, manual transmission countershaft bearing assembly (cup and cone), manual transmission countershaft, countershaft key, reverse idler gear shaft, countershaft 1st speed gear, countershaft 2nd speed gear, countershaft 3rd speed gear, countershaft 4th or 5th speed gear, countershaft 5th speed gear, countershaft 6th speed gear, manual transmission countershaft gear, PTO countershaft gear, countershaft drive gear, countershaft driven gear, front countershaft gear, front countershaft low gear, countershaft overdrive gear, reverse idler gear, and countershaft reverse gear. ASSEMBLY COVERAGE CLASS: \*countershaft cover o-ring, \*countershaft front cover o-ring, \*lower countershaft rear cover lower o-ring, \*upper right countershaft rear cover lower o-ring, and \*reverse idle gear o-ring. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: snap ring(s), clip(s), clamp(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), adapter/flange/mounting plate(s), pipe(s)/hose(s), mounting hardware, nut(s), bolt(s), and washer(s).
- 3. MAINDRIVE & MAIN SHAFT BEARINGS (026-003):** SYSTEM COVERAGE CLASS: 1st & reverse bearing, main shaft 2nd gear bearing, main shaft 3rd gear bearing, main shaft 5th gear bearing, main shaft cluster gear bearing, rear main (rear of transmission case) bearing assembly, rear main (rear of bearing retainer) bearing or bushing, front transmission main bearing assembly, and rear main (rear of transmission case) bearing race. ASSEMBLY COVERAGE CLASS: N/A. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: main shaft clutch gear and synchronizer collar bearing, main shaft pilot bushing, main shaft pilot bearing, rear main shaft pilot bearing, snap ring(s), clip(s), clamp(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), adapter/flange/mounting plate(s), pipe(s)/hose(s), mounting hardware, nut(s), bolt(s), and washer(s).
- 4. MAIN BEARING RETAINER (026-004):** SYSTEM COVERAGE CLASS: front main bearing retainer, \*input shaft bearing gasket, and input shaft bearing cover. ASSEMBLY COVERAGE CLASS: N/A. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: snap ring(s), clip(s), clamp(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), adapter/flange/mounting plate(s), pipe(s)/hose(s), mounting hardware, nut(s), bolt(s), and washer(s).
- 5. MAIN DRIVE GEAR (026-005):** SYSTEM COVERAGE CLASS: input shaft, input shaft bushing, input shaft piston pump, splitter synchronizer assembly, main drive gear main shaft thrust washer, main drive bearing cap, main drive gear bearing cap baffle, main drive front gear, main drive gear, main drive rear gear, input shaft/main drive gear bearing, main drive gear pocket bearing assembly (cup and cone), and main drive gear bearing assembly (cup and cone). ASSEMBLY COVERAGE CLASS: main drive gear oil ring baffle, \*bearing retainer front gasket, \*input shaft seal, \*main drive bearing cap oil seal, and \*main drive gear oil seal. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: snap ring(s), clip(s), clamp(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), adapter/flange/mounting plate(s), pipe(s)/hose(s), mounting hardware, nut(s), bolt(s), and washer(s).
- 6. MAIN SHAFT SYNCHRONIZER & GEARS (026-006):** SYSTEM COVERAGE CLASS: reverse gear cover, 2nd gear split washer locating ball, 1st-speed gear bushing sleeve, main shaft key, synchronizing shift plate, front and rear main shaft quill, synchronizer blocking spring, synchronizer key spring; **bearing(s):** main shaft rear bearing cup, 4th & 5th shift hub bearing race, main drive pinion ball bearing, 4th & 5th shift hub bearing, 1st & reverse gear needle bearing assembly, main shaft 2nd gear needle roller bearing; **shaft(s):** fifth gear main shaft, main shaft, output shaft; **gear(s):** front compound main drive pinion, main drive main case pinion, 1st speed gear, 2nd speed gear, 3rd speed gear, main shaft 4th or 5th speed gear, 4th speed gear, main shaft cluster gear, reverse idler cluster gear, manual transmission main shaft low gear, output shaft gear, main shaft overdrive gear, reverse gear, front reverse idler gear, rear reverse idler gear, seventh gear, sixth gear, 1st & reverse sliding gear, 2nd speed synchronizing drum assembly, high-speed synchronizing drum assembly; **synchronizer(s):** 1st & 2nd synchronizer cup, 3rd & 4th synchronizer cup, 3rd gear synchronizer cup, 4th & 5th speed synchronizer cup, 5th & 6th synchronizer cup, synchronizer blocking ring, 1st-speed synchronizing ring, 2nd-speed synchronizing ring, 3rd-speed synchronizing ring, 4th-speed synchronizing ring, 1st & 2nd synchronizer, 1st & reverse synchronizer, 3rd & 4th synchronizer, 5th & 6th synchronizer, auxiliary direct assembly synchronizer, auxiliary low-speed assembly synchronizer, range assembly synchronizer; **Thrust washer(s):** main drive gear 1st-speed thrust washer, main drive gear 2nd & 3rd-speed thrust washer, main drive gear 3rd & 4th-speed thrust washer, main drive gear 4th-speed thrust washer, main drive gear 5th-speed thrust washer, main drive gear reverse gear thrust washer, and output shaft thrust washer. ASSEMBLY COVERAGE CLASS: 1st & reverse shift hub, synchronizer hub, 1st & reverse hub sleeve, 4th & 5th hub sleeve, 2nd & 3rd hub sleeve, synchronizer sleeve; **gaskets(s):** \*rear main bearing retainer gasket, \*reverse gear cover gasket; **seal(s):** \*rear main shaft seal, \*output shaft oil seal, and \*rear main bearing retainer seal. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: main shaft clutch gear & synchronizer collar assembly, 4th & 5th sliding clutch, 1st & 2nd speed clutch sliding sleeve, 1st & 2nd speed clutch hub, fully synchronized clutch assembly, 2nd & 3rd speed clutch gear, 2nd & 3rd clutch sleeve, 3rd & 4th speed clutch hub, 3rd & 4th

speed clutch sliding sleeve, 1st & reverse gear clutch collar, manual transmission main shaft clutch gear, 6th & 7th sliding clutch, reverse sliding clutch, reverse clutch hub, 5th & 6th clutch hub, front compound sliding clutch, mainshaft speed tone ring, sliding clutch(es), clutch gear and collar, clutch hub(s), clutch sleeve(s), yoke, snap ring(s), clip(s), clamp(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), adapter/flange/mounting plate(s), pipe(s)/hose(s), mounting hardware, nut(s), bolt(s), and washer(s).

- 7. HIGH RANGE COUNTERSHAFT (026-007):** SYSTEM COVERAGE CLASS: rear hi-range countershaft drive gear, front hi-range countershaft drive gear, hi-range countershaft 3rd, 4th, 9th & 10th gear, hi-range countershaft 1st, 2nd, 7th & 8th gear, hi-range countershaft synchronizer, hi-range countershaft thrust washer, and hi-range countershaft bearing. ASSEMBLY COVERAGE CLASS: N/A. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: snap ring(s), clip(s), clamp(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), adapter/flange/mounting plate(s), pipe(s)/hose(s), mounting hardware, nut(s), bolt(s), and washer(s).
- 8. LOW RANGE COUNTERSHAFT (026-008):** SYSTEM COVERAGE CLASS: low-range countershaft drive gear, low-range countershaft forward & reverse gear, low-range countershaft output gear, low-range countershaft thrust washer, countershaft low range bearing, and internal oil pump. ASSEMBLY COVERAGE CLASS: N/A. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: snap ring(s), clip(s), clamp(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), adapter/flange/mounting plate(s), pipe(s)/hose(s), mounting hardware, nut(s), bolt(s), and washer(s).
- 9. MANUAL TRANSMISSION COVER ASSEMBLY (026-009):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: case cover, front case cover, PTO opening cover, and \*case cover gasket. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: plug(s), pin(s)/dowel(s), shim(s)/spacer(s), adapter/flange/mounting plate(s), mounting hardware, nut(s), bolt(s), and washer(s).
- 10. RAILS, FORKS & INTERNAL SHIFT MECHANISM (026-010):** SYSTEM COVERAGE CLASS: shift bar housing interlock key, shift bar housing key; **fork(s):** 1st-speed shifter fork, range shifter fork, reverse shift fork, 1st & 2nd-speed shift fork, 3rd & 4th-speed shift fork, 2nd & 3rd shifter fork, 4th & 5th speed shifter fork, 5-6 & 11-12 shifter fork, splitter shifter fork, 1st & reverse shifter fork, forward & reverse shifter fork; **rail(s):** forward & reverse shifter rail, hi-range c/s shifter rail, range shifter rail, reverse shift fork rail, 5-6 & 11-12 shifter rail, splitter shifter rail, 1st speed shifter rail, reverse shift rail, reverse shifter head rail, shift 3rd & 4th speed rail, 1st & 2nd speed shift rail, 2nd & 3rd shifter rail, 4th & 5th speed shifter rail, 1st & reverse shifter rail; **spring(s):** interlock ball spring, poppet ball spring, reverse shift spring, shift detent spring, and 1st & reverse shift finger plunger spring. ASSEMBLY COVERAGE CLASS: reverse shift plunger, shift detent plunger, air valve actuating shaft, selector shaft and lever, internal shift mechanism reverse shift lever; housing(s): shift piston housing, shift bar housing; **seal(s):** \*shifter shaft seal; **gaskets(s):** \*detent spring cover gasket, \*reverse lamp switch gasket, and \*shift bar housing gasket. PART COVERAGE CLASS: \*range shifter solenoid, \*neutral safety switch, and \*reverse lamp switch. PROGRESSIVE ONLY CLASS: Interlock Pin sleeve, shifter, shift block(s), shift finger(s), yoke(s), snap ring(s), clip(s), clamp(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), adapter/flange/mounting plate(s), pipe(s)/hose(s), mounting hardware, nut(s), bolt(s), and washer(s).
- 11. TRANSMISSION EXTERNAL CONTROL (026-011):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: N/A. PART COVERAGE CLASS: \*Shift control ECU, \*low air pressure sensor, \*remote air control solenoid, \*downshift timing switch, \*neutral safety switch, \*power shift control wiring harness, \*transmission master wiring harness, \*transmission range selector wiring harness, \*transmission shift control wiring harness. PROGRESSIVE ONLY CLASS: filter(s), baffle, board, closure, cup, equalizer, knuckle, air regulator, shift block, station, universal joint, accumulator, air module, modulator, control(s), selector valve(s), shift indicator, shift tower, shifter(s), selector(s), knob(s), bearing(s), range selector(s), valve(s), bushing(s), rod(s), sleeve(s), shaft(s), cylinder(s), lever(s), finger(s), link(s)/linkage(s), cable(s), cover(s), gasket(s), seal(s), o-ring(s), cap(s), decal(s), boot(s), plug(s), spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
- 12. MANUAL TRANSMISSION ASSEMBLY (026-012):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: N/A. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: complete manual transmission assembly.
- 13. OIL PUMP (026-013):** SYSTEM COVERAGE CLASS: internal oil pump, internal oil pump element, internal oil pump key drive, oil pump drive gear, and oil pump main drive pinion vane. ASSEMBLY COVERAGE CLASS: auxiliary countershaft mounted oil pump, PTO-mounted oil pump, transmission oil heater, \*oil heater heating element, \*oil heater timer, w/o PTO oil pump drive shaft, w/ PTO oil pump drive shaft, oil pump main drive pinion sleeve, oil pick-up tube, oil cooler cover; **gaskets(s):** \*oil cooler gasket, \*heater gasket, \*countershaft mounted oil pump gasket; **seal(s):** \*countershaft mounted oil pump o-ring. PART COVERAGE CLASS: auxiliary countershaft mounted oil pump drive collar, heat exchanger oil cooler, \*oil heater sensor, and \*oil heater wiring. PROGRESSIVE ONLY CLASS: fitting(s), snap ring(s), clip(s), clamp(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), pipe(s)/hose(s), mounting hardware, adapter/flange/mounting plate(s), nut(s), bolt(s), and washer(s).
- 14. MANUAL TRANSMISSION ELECTRONIC CONTROLS (026-014):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: \*electronic control unit (ECU), \*voltage doubler, \*ECU cover, \*ECU seal plate, and \*wiring harness o-ring. PART COVERAGE

CLASS: \*reverse lockout solenoid and \*shift prevention solenoid. PROGRESSIVE ONLY CLASS: fitting(s), snap ring(s), clip(s), clamp(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), pipe(s)/hose(s), mounting hardware, adapter/flange/mounting plate(s), nut(s), bolt(s), and washer(s).

**15. AUTOMATED TRANSMISSION (026-015):** SYSTEM COVERAGE CLASS: automation controls hydraulic accumulator, valve body assembly, clutch release cylinder, and XY shifter. ASSEMBLY COVERAGE CLASS: automation controls hydraulic control unit manifold; **housing(s)**: gear cylinder housing, shift gate housing, valve body housing, \*actuator housing assembly, roller housing assembly, clutch cover, shift tower cover, exhaust port XY shifter cover; **gasket(s)**: \*shift tower floor plate gasket, \*housing (actuator) gasket, \*auto-shift module gasket, \*oil filter housing gasket, \*XY shifter gasket; **seal(s)**: \*clutch release cylinder o-ring, and \*housing (actuator) sealing kit. PART COVERAGE CLASS: tail shaft support bushing, transmission auxiliary air tank, automation controls hydraulic reservoir, \*clutch actuator assembly, \*transmission ECU circuit breaker, \*mechatronic control module, \*transmission ECU diode, \*system manager ECU power connect relay, \*transmission ECU resistor, \*hill assist switch and \*solenoid, \*inertia brake solenoid, \*ball type reverse switch; **valve(s)**: filter by-pass valve, high-pressure relief valve, range valve, splitter valve; **module(s)**: \*auto-shift module, \*transmission ECU module, \*gear module, \*power interface module; **sensor(s)**: \*clutch actuator sensor, \*countershaft speed sensor, \*gear select sensor, \*automation controls hydraulic fluid level sensor, \*load sensor, \*oil temperature sensor, \*rotary (dual) position sensor, \*XY shifter position sensor, \*rail select sensor, \*input shaft speed sensor, \*main shaft speed sensor, \*output shaft speed sensor; **wiring(s)**: \*shift tower wiring harness, \*speed sensor wiring harness, \*main transmission wiring harness, \*clutch actuator harness, and \*XY shifter harness. PROGRESSIVE ONLY CLASS: automated transmission roller, guide, shifter lever, automated transmission shaft & lever assembly, transmission (automated transmission) filter cover, inertia brake, air filter regulator, voltage converter, shift tower, dash gear selector display, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), pipe(s)/hose(s), adapter/flange/mounting plate(s), mounting hardware, nut(s), bolt(s), and washer(s). NON-COVERED CLASS: Black box and relocation kit.

**16. COUNTERSHAFT BRAKE (026-016):** SYSTEM COVERAGE CLASS: countershaft brake piston. ASSEMBLY COVERAGE CLASS: countershaft Brake housing, valve; **seal(s)**: \*piston seal kit, \*outer seal, \*cover o-ring, and \*quick vent valve o-ring. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: countershaft brake seal support outer ring, snap ring(s), clip(s), clamp(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), adapter/flange/mounting plate(s), pipe(s)/hose(s), mounting hardware, nut(s), bolt(s), and washer(s).

**17. MANUAL TRANSMISSION RANGE SECTION (026-017):** SYSTEM COVERAGE CLASS: range section assembly, output speed tone ring, planetary carrier, planetary gear, sun gear, and range group planetary carrier. ASSEMBLY COVERAGE CLASS: N/A. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: snap ring(s), clip(s), clamp(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), adapter/flange/mounting plate(s), pipe(s)/hose(s), mounting hardware, nut(s), bolt(s), and washer(s).

## **E. AUTOMATIC TRANSMISSION SYSTEM (027)**

**1. CASE (027-001):** SYSTEM COVERAGE CLASS: tail shaft support bushing, case to output shaft bushing or bearing, scavenge pump-driven gear, velocimeter gear, clutch piston, scavenge pump, ring gear, and scavenge pump thrust washer. ASSEMBLY COVERAGE CLASS: rear gear train case, PTO cover, rear case cover, oil dipstick tube, scavenge pump housing, clutch housing, scavenge pump shaft, trans case baffle plate; **gasket(s)**: \*PTO cover gasket, \*rear case gasket, \*scavenge pump gasket, \*shaft gasket; **seal(s)**: \*dipstick seal, \*front seal, \*oil filler pipe to case seal, \*rear case seal, \*airline, hose, tube, plumbing o-ring, \*oil line, hose, tube, plumbing o-ring, \*scavenge pump o-ring, and \*case assembly o-ring. PART COVERAGE CLASS: **sensor(s)**: \*output speed sensor, \*pressure transducer sensor, and \*turbine speed sensor. PROGRESSIVE ONLY CLASS: splash guard, vent, clutch plate, gear thrust plate, spring plate, drain/expansion/pressure check plugs, sight glass, sound shield, dipstick rod, pump filter screen, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), pipe(s)/hose(s), adapter/flange/mounting plate(s), support(s), mounting hardware, nut(s), bolt(s), and washer(s).

**2. CONVERTER (027-002):** SYSTEM COVERAGE CLASS: transfer reduction converter bearing, converter turbine, converter pump, converter bearings and bushings, pump thrust washer or bearing, torque converter gear idle shaft, torque converter turbine (shaft, input) shaft, pump impeller extension, front pump drive gear, torque converter gear output gear, converter transfer reduction gear, torque converter gear idle gear, power take-off input gear, power take-off gear input bearing, turbine over-running clutch assembly, converter lock-up clutch assembly, lock-up clutch piston, converter lock-up clutch plate, stator spring, stator roller, stator thrust plate, and freewheel stator race. ASSEMBLY COVERAGE CLASS: converter pump cover assembly, converter damper assembly, converter pump hub; **seal(s)**: \*converter cover assembly o-ring, \*converter pump assembly seal, \*inner and outer lock-up clutch seal, and \*converter seal. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: converter end plug, ground sleeve, balance weight, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), pipe(s)/hose(s), adapter/flange/mounting plate(s), support(s), mounting hardware, nut(s), bolt(s), and washer(s).



- 3. HYDRAULIC RETARDER ROTOR (027-003):** SYSTEM COVERAGE CLASS: transmission retarder accumulator, transmission retarder shifter cylinder, and retarder rotor assembly. ASSEMBLY COVERAGE CLASS: transmission retarder check valve, retarder control lever, \*electrical connector seal, and transmission retarder hand control valve. PART COVERAGE CLASS: \*retarder control resistance module, \*transmission retarder solenoid, \*retarder control pressure switch, \*retarder control lever switch, \*flywheel type retarder wiring harness, and \*retarder wiring harness. PROGRESSIVE ONLY CLASS: heat shield, control pedal, boot, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), pipe(s)/hose(s), adapter/flange/mounting plate(s), support(s), mounting hardware, nut(s), bolt(s), and washer(s).
- 4. DIRECT DRIVE CLUTCH ASSEMBLY (027-004):** SYSTEM COVERAGE CLASS: clutch shaft bearing, clutch drum bushing, clutch drum, low sun gear bushing, direct drive clutch assembly, clutch kit, low sun gear, direct clutch hub, clutch piston assembly, direct drive clutch (faced) plate, direct drive clutch (steel) plate, 3rd clutch plate kit, direct drive clutch cushion spring, direct drive clutch assembly front and rear clutch hub thrust washer, pump cover to drum thrust washer. ASSEMBLY COVERAGE CLASS: \*inner and \*outer direct drive clutch piston seal. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: spring(s), fitting(s), snap ring(s), clip(s), clamp(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), pipe(s)/hose(s), adapter/flange/mounting plate(s), support(s), mounting hardware, nut(s), bolt(s), and washer(s).
- 5. HIGH-RANGE CLUTCH (027-005):** SYSTEM COVERAGE CLASS: high-range clutch housing bushing, high-range clutch disc, high-range drum, power take-off gear, high clutch piston, and backing high clutch plate. ASSEMBLY COVERAGE CLASS: \*high-range seal, \*inner high-range clutch seal, and \*outer high-range clutch seal. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: spring(s), fitting(s), snap ring(s), clip(s), clamp(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), pipe(s)/hose(s), adapter/flange/mounting plate(s), support(s), mounting hardware, nut(s), bolt(s), and washer(s).
- 6. FORWARD CLUTCH ASSEMBLY (027-006):** SYSTEM COVERAGE CLASS: turbine shaft bushing, rotating clutch bushing, forward planetary carrier, forward transmission clutch output gear, automatic transmission PTO gear, direct clutch driving hub, clutch forward hub, forward planetary needle bearing, forward planetary pinion, forward clutch piston, forward clutch (faced) plate, forward clutch (steel) plate, clutch piston ring, turbine shaft assembly, forward clutch assembly clutch hub thrust washer, forward clutch hub to direct clutch hub thrust washer, and turbine tone wheel. ASSEMBLY COVERAGE CLASS: **housing(s):** forward clutch housing, rotating clutch housing; **seal(s):** \*forward clutch countershaft o-ring, \*forward clutch countershaft gear o-ring, \*center clutch seal, \*inner and outer forward clutch seal, \*forward clutch piston retainer seal, \*reverse clutch countershaft ring seal, and \*butt joint seal kit. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: spring(s), fitting(s), snap ring(s), clip(s), clamp(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), pipe(s)/hose(s), adapter/flange/mounting plate(s), support(s), mounting hardware, nut(s), bolt(s), and washer(s).
- 7. DIRECT CLUTCH AND INTERMEDIATE SPRAG (027-007):** SYSTEM COVERAGE CLASS: intermediate sprag, inner and outer intermediate sprag race, forward and direct clutch piston, clutch exhaust ball, direct clutch (steel) plate, direct clutch (faced) plate, backing direct clutch plate, and direct clutch piston. ASSEMBLY COVERAGE CLASS: direct clutch housing, clutch piston housing; **seal(s):** \*inner, \*outer, and \*center direct clutch seals and \*piston housing o-ring. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: spring(s), fitting(s), snap ring(s), clip(s), clamp(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), pipe(s)/hose(s), adapter/flange/mounting plate(s), support(s), mounting hardware, nut(s), bolt(s), and washer(s).
- 8. INTERMEDIATE CLUTCH AND CENTER SUPPORT (027-008):** SYSTEM COVERAGE CLASS: center support bushing, intermediate clutch piston, intermediate clutch (steel) plate, intermediate clutch (faced) plate, intermediate clutch backing plate, inner low clutch race, and intermediate clutch and center support to reaction drum thrust washer. ASSEMBLY COVERAGE CLASS: **seal(s):** \*inner and \*outer intermediate clutch seals. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: spring(s), fitting(s), snap ring(s), clip(s), clamp(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), pipe(s)/hose(s), adapter/flange/mounting plate(s), support(s), mounting hardware, nut(s), bolt(s), and washer(s).
- 9. LOW-RANGE CLUTCH (027-009):** SYSTEM COVERAGE CLASS: low-range clutch disc. ASSEMBLY COVERAGE CLASS: \*low range seal. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: spring(s), fitting(s), snap ring(s), clip(s), clamp(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), pipe(s)/hose(s), adapter/flange/mounting plate(s), support(s), mounting hardware, nut(s), bolt(s), and washer(s).
- 10. REVERSE CLUTCH ASSEMBLY (027-010):** SYSTEM COVERAGE CLASS: reverse clutch piston, clutch piston bearing, clutch pressure plate, clutch reaction (selective) plate, reverse clutch (faced) plate, reverse clutch (steel) plate, reverse clutch kit plate, and reverse clutch cushion spring. ASSEMBLY COVERAGE CLASS: \*inner and outer reverse clutch piston seals, \*2nd and 3rd reverse seal kit. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: spring(s), fitting(s), snap ring(s), clip(s), clamp(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), pipe(s)/hose(s), adapter/flange/mounting plate(s), support(s), mounting hardware, nut(s), bolt(s), and washer(s).

- 11. SPLITTER (027-011):** SYSTEM COVERAGE CLASS: splitter clutch piston, splitter planetary pinion, planetary splitter needle bearing, splitter gear, front & rear splitter main shaft bushing, splitter backing plate, splitter high and low clutch plates, splitter planetary carrier, splitter planet carrier assembly, splitter high and low clutch assembly, splitter clutch drum, splitter clutch hub, and splitter main shaft. ASSEMBLY COVERAGE CLASS: \*splitter seal. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: spring(s), fitting(s), snap ring(s), clip(s), clamp(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), pipe(s)/hose(s), adapter/flange/mounting plate(s), support(s), mounting hardware, nut(s), bolt(s), and washer(s).
- 12. HOUSING CONVERTER (BELL HOUSING) (027-012):** SYSTEM COVERAGE CLASS: converter bearing and bushing, PTO gear, gear assembly, and torque converter assembly. ASSEMBLY COVERAGE CLASS: drive chain, oil pump drive hub, PTO hub, cooler manifold, converter (bell housing) housing, torque converter housing ring; **gasket(s):** \*converter housing to case gasket, \*cooler manifold mounting gasket; **seal(s):** \*converter housing seal and \*PTO hub o-ring. PART COVERAGE CLASS: \*automatic transmission speed converter sensor. PROGRESSIVE ONLY CLASS: access cover, filter element, filter magnet, torque converter plug, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), pipe(s)/hose(s), adapter/flange/mounting plate(s), support(s), mounting hardware, nut(s), bolt(s), and washer(s).
- 13. PLANET CARRIER &/OR OUTPUT SHAFT ASSEMBLY (027-013):** SYSTEM COVERAGE CLASS: bearing assembly, planetary carrier thrust bearing assembly, output shaft bushing, transmission planetary carrier, transmission planetary carrier clutch, planetary shaft flange, sun input gear, parking gear, pinion gearing set, planetary pinion, planetary carrier clutch piston, planet pinion shaft lock plate, retarder valve, return spring indexing ring, planetary carrier reverse ring gear, retarder rotor, output or output flange shaft, spindle, planetary carrier relay spring, retarder valve spring, planetary carrier spring assembly, stator, needle thrust bearing assembly, planetary carrier input sun gear to carrier thrust washer, planetary carrier output shaft to case selective thrust washer, planetary carrier output shaft to case thrust washer, and tone wheel. ASSEMBLY COVERAGE CLASS: retarder housing cover, \*retarder gasket kit; **seal(s):** \*output shaft o-ring, \*carrier o-rings, and \*output shaft oil seal. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: spring(s), fitting(s), snap ring(s), clip(s), clamp(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), pipe(s)/hose(s), adapter/flange/mounting plate(s), support(s), mounting hardware, nut(s), bolt(s), and washer(s).
- 14. FRONT REACTION CARRIER & LOW SPRAG ASSEMBLY (027-014):** SYSTEM COVERAGE CLASS: reaction carrier thrust bearing assembly, reaction drum bushing, reaction drum, intermediate range gear assembly, reaction carrier needle roller bearing, front carrier planet pinion pin, front or intermediate reaction planetary carrier pinion, front or intermediate reaction planetary carrier, outer low sprag clutch race, intermediate range ring gear, front internal ring gear, low clutch or low roller clutch sprag assembly, front internal to reaction carrier thrust washer, and low sprag clutch pinion (bronze or steel) thrust washer. ASSEMBLY COVERAGE CLASS: \*planetary carrier seal. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: spring(s), fitting(s), snap ring(s), clip(s), clamp(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), pipe(s)/hose(s), adapter/flange/mounting plate(s), support(s), mounting hardware, nut(s), bolt(s), and washer(s).
- 15. OUTPUT REAR OR LOW CARRIER ASSEMBLY (027-015):** SYSTEM COVERAGE CLASS: front internal low-range gear, planetary (output, rear or low) carrier, rear carrier planet pinion pin, planetary carrier pinion thrust washer (steel or bronze), low-range carrier needle roller bearing, planetary (rear or low output) pinion, and low ring gear. ASSEMBLY COVERAGE CLASS: N/A. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: spring(s), fitting(s), snap ring(s), clip(s), clamp(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), pipe(s)/hose(s), adapter/flange/mounting plate(s), support(s), mounting hardware, nut(s), bolt(s), and washer(s).
- 16. FIRST RANGE ASSEMBLY (027-016):** SYSTEM COVERAGE CLASS: First-range planetary carrier, needle bearing, planet pinion, and ring gear. ASSEMBLY COVERAGE CLASS: N/A. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: spring(s), fitting(s), snap ring(s), clip(s), clamp(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), pipe(s)/hose(s), adapter/flange/mounting plate(s), support(s), mounting hardware, nut(s), bolt(s), and washer(s).
- 17. SUN GEAR & SHAFT ASSEMBLY (027-017):** SYSTEM COVERAGE CLASS: sun gear shaft, front and rear sun gear bushings, support to sun gear thrust race and needle thrust bearing, sun gear, sun gear to internal gear thrust race, and sun gear to internal gear needle thrust bearing. ASSEMBLY COVERAGE CLASS: N/A. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: spring(s), fitting(s), snap ring(s), clip(s), clamp(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), pipe(s)/hose(s), adapter/flange/mounting plate(s), support(s), mounting hardware, nut(s), bolt(s), and washer(s).
- 18. REVERSE RANGE ASSEMBLY (027-018):** SYSTEM COVERAGE CLASS: reverse range sun gear, reverse range ring gear, planetary carrier, planetary needle bearing, and planetary pinion. ASSEMBLY COVERAGE CLASS: N/A. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: spring(s), fitting(s), snap ring(s), clip(s), clamp(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), pipe(s)/hose(s), adapter/flange/mounting plate(s), support(s), mounting hardware, nut(s), bolt(s), and washer(s).
- 19. MAIN SHAFT ASSEMBLY & REAR INTERNAL GEAR (027-019):** SYSTEM COVERAGE CLASS: transmission main shaft, rear internal gear, internal gear to output shaft thrust race, internal gear to output shaft needle thrust bearing, and main shaft thrust

bearing. ASSEMBLY COVERAGE CLASS: \*main shaft seal. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: spring(s), fitting(s), snap ring(s), clip(s), clamp(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), pipe(s)/hose(s), adapter/flange/mounting plate(s), support(s), mounting hardware, nut(s), bolt(s), and washer(s).

**20. BANDS (027-020):** SYSTEM COVERAGE CLASS: low brake band, front brake band, rear low and reverse brake band, and kick down band. ASSEMBLY COVERAGE CLASS: N/A. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: spring(s), fitting(s), snap ring(s), clip(s), clamp(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), pipe(s)/hose(s), adapter/flange/mounting plate(s), support(s), mounting hardware, nut(s), bolt(s), and washer(s).

**21. REAR SERVO ASSEMBLY (027-021):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: accumulator piston, rear accumulator spring, rear servo, intermediate servo, rear servo roller, rear servo disc, reverse servo piston, rear servo piston spring, rear servo control plunger, rear band apply pin, rear servo cover; **gasket(s)**: \*rear servo cover gasket; **seal(s)**: \*reverse servo piston seal, and \*rear servo o-ring. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: accumulator piston seal ring, rear servo backstop, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), pipe(s)/hose(s), adapter/flange/mounting plate(s), support(s), mounting hardware, nut(s), bolt(s), and washer(s).

**22. LOW SERVO ASSEMBLY (027-022):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: low servo piston, piston apply (cushion) spring, piston rod, low servo cover, piston apply spring seat, piston return spring; **seal(s)**: \*cover seal and \*piston oil seal (or o-ring). PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: spring(s), fitting(s), snap ring(s), clip(s), clamp(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), pipe(s)/hose(s), adapter/flange/mounting plate(s), support(s), mounting hardware, nut(s), bolt(s), and washer(s).

**23. FRONT SERVO ASSEMBLY (2ND GEAR OVERRUN) (027-023):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: front servo piston, front servo piston pin, inner and outer front servo piston springs, and \*servo piston cover gasket. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: spring(s), fitting(s), snap ring(s), clip(s), clamp(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), pipe(s)/hose(s), adapter/flange/mounting plate(s), support(s), mounting hardware, nut(s), bolt(s), and washer(s).

**24. MAIN CONTROL VALVE BODY ASSEMBLY (027-024):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: main control valve body, 2-3 modulator valve bushing, inching valve cylinder, front accumulator piston, 1-2 modulator or shift control sleeve or bushing, retarder valve body, channel, check or rear pump priming ball, valve body control valve sleeve, main modulator valve housing, inching valve leveler, inching valve plunger, detent regulator valve, pressure transducer, 1-2 or shift control modulator valve, 2-3 modulator valve, detent valve, 3-2 downshift valve, 1-2 accumulator valve, manual range selector valve, modulator limit valve, interlock valve, override valve, main modulator valve assembly, front pump check valve, rear pump check valve, throttle valve, high speed downshift timing valve, a/r valve, control relief valve, exhaust valve, lockup relay valve, main control valve, pilot valve, shift valve, solenoid regulator valve, torque limiting valve, trim valve; valve body check ball; **spring(s)**: A/R valve spring, accumulator spring, control relief spring, converter regulator valve spring, exhaust valve spring, front accumulator piston spring, inching valve spring, interlock valve spring, latch valve spring, lockup relay valve spring, main control valve spring, override valve spring, regulator solenoid valve spring, shift spring, trim spring; **stop(s)**: A/R valve stop, converter regulator valve stop, exhaust valve stop, latch valve stop, lockup relay valve stop, main control valve stop, override valve stop; **gasket(s)**: \*plate or spacer to case gasket, \*valve body to plate or \*spacer gasket, \*valve body spacer plate gasket, \*electrical connector gasket/seal; **seal(s)**: \*accumulator valve o-ring, \*solenoid valve o-ring, \*oil level sensor seal, \*inching valve seal, \*downshift valve sleeve seal, and \*face seal. PART COVERAGE CLASS: \*transmission shift control valve wiring harness; **sensor(s)**: \*line pressure sensor, \*oil level sensor, \*oil temperature sensor, \*range sensor, \*temperature sensor; **solenoid(s)**: \*torque converter clutch solenoid, \*on/off solenoid, \*pressure control solenoid, shift solenoid, \*trim solenoid; **switch(s)**: \*fluid temperature switch, \*kickdown solenoid switch, \*torque converter lockup switch, \*valve body pressure switch, and \*spark control switch. PROGRESSIVE ONLY CLASS: valve body filter, oil level sensor base plate, inching pedal linkage cable, oil ring, inching pedal, plug(s), valve body solenoid screen, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), pipe(s)/hose(s), adapter/flange/mounting plate(s), support(s), mounting hardware, nut(s), bolt(s), and washer(s).

**25. AUTOMATIC TRANSMISSION DETENT SOLENOID ASSEMBLY (027-025):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: \*solenoid assembly gasket, \*electrical connector seal, and \*solenoid tube o-ring seal. PART COVERAGE CLASS: \*solenoid assembly. PROGRESSIVE ONLY CLASS: solenoid tube kit, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), pipe(s)/hose(s), adapter/flange/mounting plate(s), support(s), mounting hardware, nut(s), bolt(s), and washer(s).

**26. MODULATOR ASSEMBLY (027-026):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: hydraulic modulator valve, vacuum modulator valve, and \*vacuum modulator seal. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: spring(s), fitting(s), snap ring(s), clip(s), clamp(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), pipe(s)/hose(s), adapter/flange/mounting plate(s), support(s), mounting hardware, nut(s), bolt(s), and washer(s).

- 27. STATOR CONTROL VALVE BODY ASSEMBLY (027-027):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: N/A. PART COVERAGE CLASS: stator control valve and stator control valve body. PROGRESSIVE ONLY CLASS: spring(s), fitting(s), snap ring(s), clip(s), clamp(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), pipe(s)/hose(s), adapter/flange/mounting plate(s), support(s), mounting hardware, nut(s), bolt(s), and washer(s).
- 28. VARIABLE PITCH STATOR CONTROL SOLENOID ASSEMBLY (027-028):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: \*variable pitch stator control solenoid assembly and \*variable pitch stator solenoid gasket. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: spring(s), fitting(s), snap ring(s), clip(s), clamp(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), pipe(s)/hose(s), adapter/flange/mounting plate(s), support(s), mounting hardware, nut(s), bolt(s), and washer(s).
- 29. AUTOMATIC TRANSMISSION OIL PUMP ASSEMBLY (027-029):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: downshift timing valve ball, coupler bearing, oil pump bearing, front pump body, front pump body bushing, front pump or plate assembly cover, front pump driven gear, front pump driving gear, stator shaft, stator shaft bushing, reverse & modulator boost valve sleeve, oil pump thrust washer, converter flow stop, lube regulator stop, main regulator valve stop, downshift timing valve ball; **valve(s):** oil cooler or lubrication bypass valve, pressure regulator valve, converter outcheck valve, downshift timing valve, reverse & modulator boost valve, clutch valve, converter flow valve, lube regulator valve, main regulator valve, oil pump relief valve, transmission oil cooler thermo valve; **spring(s):** clutch valve spring, converter flow spring, downshift timing valve spring, pressure regulator spring, lube regulator spring, main regulator spring, oil cooler or lubrication bypass spring; **gasket(s):** \*front pump cover to case gasket, \*oil pump separator plate gasket, \*strainer gasket; **seal(s):** \*converter housing bolt seal, \*oil pump to case bolt seal, \*front pump seal, \*o-ring/seal - front oil pump to case o-ring, and \*oil pump o-ring. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: spring(s), fitting(s), snap ring(s), clip(s), clamp(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), pipe(s)/hose(s), adapter/flange/mounting plate(s), support(s), mounting hardware, nut(s), bolt(s), and washer(s).
- 30. REAR PUMP (027-030):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: rear pump body, rear pump body bushing, rear pump drive key, rear pump drive gear, rear pump driven gear and \*rear pump seal. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: wear plate, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), pipe(s)/hose(s), adapter/flange/mounting plate(s), support(s), mounting hardware, nut(s), bolt(s), and washer(s).
- 31. REAR BEARING RETAINER OR CASE EXTENSION ASSEMBLY (027-031):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: extension housing bearing or bushings, speedometer driven gear, speed sensor gear, case extension housing, channel plate, solenoid separator plate, stop valve spring, case housing extension exhaust valve, signal valve, rear bearing internal retaining ring, case housing extension relay valve; **gasket(s):** \*case extension housing gasket, \*channel plate gasket, \*rear bearing retainer gasket, \*retarder gasket, separator plate gasket, \*solenoid cover gasket; **seal(s):** \*speed sensor o-ring, \*case o-ring, \*extension to case seal, \*output shaft seal, and \*rear seal. PART COVERAGE CLASS: \*oil pump speed converter sensor, \*solenoid; **wiring:** \*modulator valve cover wiring harness, and \*transmission oil pump wiring harness. PROGRESSIVE ONLY CLASS: modulating valve cover, plugs, filter screen, yoke(s), spring(s), fitting(s), snap ring(s), clip(s), clamp(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), pipe(s)/hose(s), adapter/flange/mounting plate(s), support(s), mounting hardware, nut(s), bolt(s), and washer(s).
- 32. PARKING LOCK OR BRAKE & ACTUATOR ASSEMBLY (027-032):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: \*parking lock actuator rod, \*parking lock actuator solenoid, parking lock pawl, parking lock disengaging spring, parking pawl shaft, and \*pawl shaft to case seal. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: guide, cable, wear plate, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), pipe(s)/hose(s), adapter/flange/mounting plate(s), support(s), mounting hardware, nut(s), bolt(s), and washer(s).
- 33. RANGE SELECTOR OR MANUAL LINKAGE (027-033):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: shift control rod, shift lever housing, control linkage bearing, direction control column bushing, ECU mount bushing, shift lever bushing, brake shift interlock cable, PRNDL Selector cable, selector shaft cable, shift cable, throttle valve cable, range selector or manual detent lever, vehicle operator range selector lever, roller detent lever, throttle valve control lever, outer range selector or manual lever and shaft, selector shaft lever type shift selector, push button type shift selector, steering column mounted shifter, shift motor, variable force motor, shift linkage detent spring, PRNDL selector spring, shift lever spring, manual detent spring and roller; **cover(s):** ECU cover, ECU connector cover, shift housing cover, shift lever cover; **gasket(s):** \*shift selector gasket, \*ECU gasket seal connector; **seal(s):** \*electrical connector o-ring, \*noise suppressor o-ring, \*modulator o-ring, \*lock assist seal, \*range selector or manual shaft seal, and \*shift housing seal. PART COVERAGE CLASS: \*shift selector circuit board, shift control ECU; **module(s):** \*shift selector module, \*vehicle interface module; **relay(s):** \*brake shift interlock relay, \*ECU relay; **sensor(s):** \*input sensor, \*manual lever position sensor, \*overlay sensor, \*speed sensor; **solenoid(s):** \*brake shift interlock solenoid; **switch(s):** \*inhibitor switch, \*neutral switch, \*overspeed switch, \*transmission disengage switch; **wiring:** \*shift selector wiring, and \*speed sensor wiring harness. PROGRESSIVE ONLY CLASS: boot(s), cap(s), shift knob

button(s), PRNDL display, graphics, keypads, lamp, lens, magnet, guide, cable, wear plate, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), pipe(s)/hose(s), adapter/flange/mounting plate(s), support(s), mounting hardware, nut(s), bolt(s), and washer(s).

**34. AUTOMATIC TRANSMISSION GOVERNOR ASSEMBLY (027-034):** SYSTEM COVERAGE CLASS: governor driven gear. ASSEMBLY COVERAGE CLASS: governor valve, hub seal ring, governor cover, hub seal ring; **gasket(s):** \*governor body gasket, and \*governor cover gasket. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: filter, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), pipe(s)/hose(s), adapter/flange/mounting plate(s), support(s), mounting hardware, nut(s), bolt(s), and washer(s).

**35. OUTPUT DRIVE TRANSFER GEARING (027-035):** SYSTEM COVERAGE CLASS: output transfer gear and output transfer gear idler gear bearing. ASSEMBLY COVERAGE CLASS: \*output flange seal. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: spring(s), fitting(s), snap ring(s), clip(s), clamp(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), pipe(s)/hose(s), adapter/flange/mounting plate(s), support(s), mounting hardware, nut(s), bolt(s), and washer(s).

**36. OIL PAN & SCREEN ASSEMBLY (027-036):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: filter housing, oil pan, input or turbine shaft; **gasket(s):** \*oil pan gasket, \*drain plug seal, \*oil fill tube seal, \*oil filter sealing ring (or gasket), and \*input shaft seal ring. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: filter(s), drain plug, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), pipe(s)/hose(s), adapter/flange/mounting plate(s), support(s), mounting hardware, nut(s), bolt(s), and washer(s).

**37. AUTOMATIC TRANSMISSION ASSEMBLY (027-037):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: N/A. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: complete automatic transmission assembly.

**38. AUTOMATIC TRANSMISSION ELECTRONIC CONTROLS (027-038):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: \*connector housing, \*diagnostic data reader connector cover, \*connector seal or o-ring, and \*push button shift control gasket. PART COVERAGE CLASS: \*connector body, \*diagnostic data reader connector, \*electronic control unit (ECU) connector, \*sensor connector, \*automatic transmission electronic control unit (ECU), \*electronic control connector plug, connector receptacle, \*transmission to vehicle relay assembly, \*resistor, \*diagnostic data reader connector socket, \*connector terminal socket, \*OD cancel switch, \*transmission voltage doubler, \*ECU wiring harness and \*push button shift control overlay. PROGRESSIVE ONLY CLASS: spring(s), fitting(s), snap ring(s), clip(s), clamp(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), pipe(s)/hose(s), adapter/flange/mounting plate(s), support(s), mounting hardware, nut(s), bolt(s), and washer(s).

**39. MANIFOLD COOLER (027-039):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: manifold cooler, cooler housing, cooler housing cover, cooler port cover; **gasket(s):** \*manifold plate gasket, \*cooler gasket, \*cooler housing gasket, \*cooler housing cover gasket, \*tube connector gasket; **seal(s):** \*cooler manifold o-rings. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: plug(s), spring(s), fitting(s), snap ring(s), clip(s), clamp(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), pipe(s)/hose(s), adapter/flange/mounting plate(s), support(s), mounting hardware, nut(s), bolt(s), and washer(s).

**40. DUAL CLUTCH ASSEMBLY (027-041):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: drive clutch, driven clutch, drive chain, clutch (moveable or fixed) face assembly, driven clutch cam, and drive clutch drive hub. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: belt(s), weight(s), plug(s), spring(s), fitting(s), snap ring(s), clip(s), clamp(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), pipe(s)/hose(s), adapter/flange/mounting plate(s), support(s), mounting hardware, nut(s), bolt(s), and washer(s).

## F. AUXILIARY TRANSMISSION SYSTEM (028)

**1. AUXILIARY TRANSMISSION CASE (028-001):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: Auxiliary transmission case, auxiliary shaft yoke, rear housing plate, \*rear housing plate gasket, and \*PTO cover gasket. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: shift yoke bar, plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

**2. AUXILIARY TRANSMISSION COVER (028-002):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: cover assembly, first and second speed rail, direct and overdrive rail, first and second speed fork, direct and overdrive fork, \*cover gasket, and \*shift rail seal. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: breather, plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

**3. MAIN DRIVE (028-003):** SYSTEM COVERAGE CLASS: main drive gear, main drive gear bearings, main drive gear bearing cup and cone, main drive gear cap. ASSEMBLY COVERAGE CLASS: input shaft; **gasket(s):** \*input shaft bearing gasket, \*main drive gear cap gasket; **seal(s):** \*input shaft seal, and \*main drive gear seal. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), connector(s), retainer(s), pin(s)/dowel(s),

shim(s)/spacer(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

4. **MAIN SHAFT COMPONENTS (028-004):** SYSTEM COVERAGE CLASS: main shaft, main shaft bearing, rear main shaft bearing cap, main shaft gear bushing, main shaft first speed gear, main shaft low gear, main shaft overdrive gear, and main shaft second speed gear. ASSEMBLY COVERAGE CLASS: direct & overdrive clutch collar, first & second speed clutch collar, first & second clutch gear, main shaft clutch gear, clutch direct and overdrive gear, main shaft gear sleeve, main shaft end yoke; **gasket(s):** \*front bearing retainer gasket, \*output shaft bearing gasket, \*main shaft rear bearing gasket; and **seal(s):** \*main shaft rear bearing seal. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
5. **COUNTERSHAFT (028-005):** SYSTEM COVERAGE CLASS: countershaft, countershaft bearing cup and cone, countershaft bearing cap, countershaft direct gear, countershaft overdrive gear, and countershaft second speed gear. ASSEMBLY COVERAGE CLASS: \*countershaft bearing cap gasket. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
6. **AUXILIARY TRANSMISSION (028-006):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: N/A. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: complete auxiliary transmission assembly.
7. **OUTPUT HOUSING (028-007):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: output housing. PART COVERAGE CLASS: \*output housing speed sensor and \*output housing speed sensor wiring harness. PROGRESSIVE ONLY CLASS: fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

## G. MANUAL MAIN TRANSMISSION AUXILIARY SECTION SYSTEM (029)

1. **MANUAL TRANSMISSION ASSEMBLY AUXILIARY SECTION (029-001):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: auxiliary section housing and \*auxiliary to main gasket. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: magnet, fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
2. **REAR BEARING COVER (029-002):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: main shaft rear bearing cover, countershaft rear bearing cover, driven speedometer drive bushing; **gasket(s):** \*main transmission main shaft rear bearing gasket, \*countershaft rear bearing gasket; and **seal(s):** \*main shaft rear bearing cover seal. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
3. **AUXILIARY SECTION COUNTERSHAFT (029-003):** SYSTEM COVERAGE CLASS: auxiliary section countershaft, and front and rear auxiliary countershaft bearings. ASSEMBLY COVERAGE CLASS: N/A. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
4. **SYNCHRONIZER AUXILIARY SECTION (029-004):** SYSTEM COVERAGE CLASS: synchronizer bearing, clutch range gear, reduction gear, synchronizer auxiliary mainshaft, high range synchronizer, low range synchronizer, high range synchronizer pin, and low range synchronizer pin. ASSEMBLY COVERAGE CLASS: N/A. PART COVERAGE CLASS: synchronizer full round yoke and synchronizer half round yoke. PROGRESSIVE ONLY CLASS: sliding clutch, fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
5. **MAIN SHAFT AUXILIARY SECTION (029-005):** SYSTEM COVERAGE CLASS: rear auxiliary main shaft bearing, auxiliary main shaft bearing and bushing, auxiliary reduction gear, main shaft intermediate/low gear, main shaft hole gear, main shaft splitter gear, key and pin assembly, range shift main shaft, main shaft auxiliary, and auxiliary main shaft quill. ASSEMBLY COVERAGE CLASS: N/A. PART COVERAGE CLASS: auxiliary section main shaft end yoke and rear yoke sleeve. PROGRESSIVE ONLY CLASS: intermediate clutch gear, splitter clutch gear, fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

- 6. DRIVE GEAR- AUXILIARY SECTION (029-006):** SYSTEM COVERAGE CLASS: auxiliary forward driver gear, rear auxiliary drive gear, and auxiliary drive gear bearing. ASSEMBLY COVERAGE CLASS: \*auxiliary drive gear o-ring. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
- 7. INTERMEDIATE SECTION HOUSING (029-007):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: intermediate section housing, oil trough assembly, and \*intermediate to main gasket. PART COVERAGE CLASS: oil reservoir. PROGRESSIVE ONLY CLASS: magnet, fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

## ENGINE/MOTOR SYSTEMS GROUP

### H. POWER PLANT SYSTEM (045)

- 1. FRONT COVER(S) ASSEMBLY (045-001):** SYSTEM COVERAGE CLASS: Idle Gear, idle gear bushing, idle gear shaft, and gear housing. ASSEMBLY COVERAGE CLASS: cylinder block end plate, engine pressure relief valve, idle gear thrust bushing, engine auxiliary shaft; housing/cover(s): front cover access hole cover, timing chain or gear cover, camshaft and balance shaft weight cover, upper front cover, lower front cover, timing belt cover; gasket(s): \*cylinder block end plate gasket, \*timing cover gasket, \*idler gear support gasket, \*upper front cover gasket, \*lower front cover gasket, \*timing belt cover gasket, \*gear housing gasket; seal(s): \*front cover access hole seal, \*engine auxiliary shaft seal, \*front cover o-ring, \*timing cover seal, \*gear cover seal, and \*lower cover seal. PART COVERAGE CLASS: \*timing Indicator, \*front cover exhaust temperature sensor, and \*front cover engine shutdown override switch. PROGRESSIVE ONLY CLASS: nut(s), bolt(s), and mounting hardware.
- 2. BLOCK AND CRANKCASE ASSEMBLY (045-002):** SYSTEM COVERAGE CLASS: liner piston carbon scraper ring(s), engine camshaft bearing(s), engine end cam & balance shaft bearing(s), engine intermediate camshaft bearing(s), crankshaft main bearing cap(s), engine crankshaft main bearing(s), engine crankshaft thrust bearing(s), crankshaft thrust washer(s) and crankshaft bearing(s). ASSEMBLY COVERAGE CLASS: seal(s): \*crankshaft rear main bearing seal, \*side main bearing cap seal, \*cylinder liner crevice seal, \*cylinder liner o-ring(s), \*cylinder block expansion plug o-ring, \*camshaft support o-ring, \*engine block oil plug o-ring; gasket(s): \*water header cover gasket, \*valve cover gasket, \*oil galley flange plate gasket, \*water outlet adapter gasket, \*air box inspection plate gasket, \*air box plug gasket, \*retainer rear main seal gasket, \*block-off plate gasket, \*rear of block housing seal, \*upper valve cover gasket, \*engine block valley pan gasket, and \*bed plate gasket. PART COVERAGE CLASS: \*engine block heater, bleed valve, bleed valve bushing, serpentine belt idler pulley, \*engine wiring harness, \*crankshaft position sensor, and \*valve cover gasket connector pigtail. PROGRESSIVE ONLY CLASS: engine block, cylinder liner(s), cylinder block sleeve(s), counterbore sleeve(s), mounting/adaptor/flange/wear plate(s), shim(s)/spacer(s), mounting hardware, nut(s), bolt(s), washer(s), and snap ring(s).
- 3. CRANKSHAFT ASSEMBLY (045-003):** SYSTEM COVERAGE CLASS: crankshaft drive pulley, power take-off chain sprocket wheel, engine PTO sprocket wheel bearing, crankshaft gear, Front crankshaft oil deflector or slinger(s), crankshaft sleeve, crankshaft hub, and engine crankshaft assembly. ASSEMBLY COVERAGE CLASS: crankshaft pulley adapter, rear crankshaft cover, front crankcase cover; seal(s): \*front crankshaft seal, \*front crankshaft seal carrier, \*rear crankshaft seal, \*front crankshaft dust seal, \*inner seal; gasket(s): \*Rear Main Bearing gasket, \*fuel injection pump mounting gasket, \*rear main bearing gasket set, and \*lower gasket set. PART COVERAGE CLASS: \*crankshaft position sensor and \*timing stator. PROGRESSIVE ONLY CLASS: crankshaft dowel, mounting/adaptor/flange/wear plate(s), crankshaft woodruff key, coupler(s), shim(s)/spacer(s), mounting hardware, stud(s), clamp(s), nut(s), bolt(s), washer(s), and snap ring(s).
- 4. FLYWHEEL ASSEMBLY(045-004):** SYSTEM COVERAGE CLASS: flexplate. ASSEMBLY COVERAGE CLASS: flywheel housing, lower flywheel housing cover, \*Lower flywheel cover gasket, \*flywheel housing gasket, and \*flywheel housing o-ring. PART COVERAGE CLASS: flywheel starting ring gear. PROGRESSIVE ONLY CLASS: flywheel, flywheel bushing, mounting/adaptor/flange/wear plate(s), pin(s)/dowel(s), shim(s)/spacer(s), mounting hardware, nut(s), bolt(s), and washer(s).
- 5. CRANKSHAFT HARMONIC BALANCER ASSEMBLY (045-005):** SYSTEM COVERAGE CLASS: crankshaft harmonic balancer, crankshaft pulley, crankshaft key, crankshaft harmonic balancer bushing, and viscous vibration damper. ASSEMBLY COVERAGE CLASS: balancer torsional hub and cone and \*harmonic balancer o-ring. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: shim(s)/spacer(s), mounting hardware, nut(s), bolt(s), and washer(s).
- 6. CONNECTING ROD, PISTON, AND RING ASSEMBLY(045-006):** SYSTEM COVERAGE CLASS: connecting rod & cap assembly, piston pin bushing(s), engine connecting rod bearing(s), engine piston(s), engine piston pin(s), piston compression ring(s), piston oil control (includes expander) ring(s), intermediate piston ring(s), piston expander ring(s), connecting rod cap(s), piston skirt(s), and connecting rod bushing(s). ASSEMBLY COVERAGE CLASS: N/A. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: retainer(s), snap ring(s), mounting hardware, nut(s), bolt(s), and washer(s).

- 7. CAMSHAFT ACCESSORY DRIVE AND VALVE ASSEMBLY (045-008):** SYSTEM COVERAGE CLASS: camshaft thrust washer or plate, engine timing chain camshaft sprocket or gear, camshaft timing sprocket or gear, engine camshaft idler gear, engine idler gear bearing, engine timing chain, accessory drive gear, balance shaft, balance shaft gear, blower drive gear, fuel injection pump drive gear, fuel injection pump driven gear, injector or valve lifter guide(s), valve lifter(s), engine camshaft push rod(s), engine intake valve(s), engine exhaust valve(s), valve spring(s), exhaust valve spring cap(s), intake valve spring cap(s), valve spring key(s), valve spring seat(s), valve bridge(s), valve roator, rocker arm shaft(s), exhaust rocker arm(s), intake rocker arm(s), rocker arm shaft support(s), rocker arm shaft spring(s), rocker arm ball, rocker arm stud, rocker arm pivot, accessory drive shaft bushing, camshaft thrust flange, cam follower foller pin(s), on tappet roller cam follower(s), on tappet shaft cam follower(s), injector tappet(s), valve tappet(s), mechanical variable timing eccentric (cam follower), mechanical variable timing pinion gear, crosshead valve guide(s), injector rocker arm bushing(s), camshaft, camshaft pin, injector cam follower(s), accessory drive thrust washer, cam follower shaft, cam follower lever injector bushing(s), cam follower lever intake bushing(s), cam follower lever exhaust bushing(s), crosshead valve, cam follower injector lever roller pin(s), cam follower intake & exhaust lever roller pin(s), cam follower injector lever(s), cam follower injector lever roller(s), cam follower intake & exhaust lever(s), intake & exhaust cam follower lever roller(s), camshaft thrust bearing kit, camshaft gear key, injector rocker arm(s), timing chain link, timing gear gear set, valve spring lock(s), intake/exhaust valve keeper(s), camshaft bushing(s), rocker arm cap(s), valve keeper lock(s), balance shaft drive chain, balance shaft drive chain tensioner, balance shaft sprocket, timing chain guide bushing, overhead cam camshaft housing bearing cap, engine timing idler sprocket, engine variable timing sprocket, and engine camshaft gear. ASSEMBLY COVERAGE CLASS: oil pump drive chain, camshaft thrust button, accessory drive shaft, balance shaft drive chain guide, push rod guide, timing chain tensioner guide, timing chain guide, rocker arm cover baffle, injection pump driven gear hub, engine timing idler, timing gear oil nozzle, engine timing gear oiler, timing chain idler gear shaft, accessory drive coupling sleeve; **housing/cover(s):** variable valve timing housing seal plate, accessory drive cover, camshaft cover, push rod or lifter compartment cover, rocker arm/valve cover, accessory drive shaft housing, cam follower housing, camshaft (overhead cam) housing, rocker arm housing, \*variable actuator housing; **gasket(s):** \*accessory drive mounting gasket, \*camshaft housing gasket, \*camshaft thrust plate gasket, \*spark plug well cover gasket, \*cam follower housing gasket, \*rocker arm housing gasket, \*fuel injection plenum gasket, \*push rod cover gasket, \*rocker arm cover (valve cover gasket) gasket, \*variable timing solenoid gasket, \*timing chain tensioner gasket; **seal(s):** \*exhaust valves adjustment screw button o-ring, \*accessory drive cover o-ring, \*variable valve actuator harness o-ring, \*mechanical variable timing o-ring, \*accessory drive shaft key seal, \*front camshaft seal, \*generator drive seal, \*variable timing adjuster magnet seal, \*pushrod tube seal, \*mechanical variable timing rectangular seal, \*rocker arm shaft seal, \*engine variable sensor seal, \*valve guide seal(s), \*valve stem seal(s), \*balance shaft oil seal, \*valve cover plug seal/o-ring, and \*mechanical variable timing actuator seal. PART COVERAGE CLASS: timing belt idler pulley bearing, accessory drive pulley, timing belt idler pulley, timing belt tensioner pulley, balance shaft front pulley, accessory drive pulley sleeve, timing belt idler pulley bearing, timing belt tensioner, balance shaft belt tensioner, \*Mechanical variable timing switch, \*intake valves variable actuator, \*variable actuator wiring, \*variable actuator solenoids, \*intake valve actuator(IVA) oil pressure sensor, \*IVA Warm-up coil, \*variable valve actuator(VVA) sensor tube, \*mechanical variable timing air control solenoid valve, \*variable timing pressure limiting valve, and \*rocker arm oil flow valve. PROGRESSIVE ONLY CLASS: weight(s), snap ring(s), clip(s), retainer(s), adapter/flange/mounting plate(s), pin(s)/dowel(s), shim(s)/spacer(s), pipe(s)/hose(s), mounting hardware, nut(s), bolt(s), and washer(s).
- 8. OIL PUMP AND DISTRIBUTION ASSEMBLIES (045-009):** SYSTEM COVERAGE CLASS: engine oil pump body, oil pump drive gear, oil pump driven gear, drive shaft bushing, driven gear shaft, oil pressure regulator valve or ball, oil pressure regulator valve spring, piston cooling oil nozzle, engine oil pump rotor bearing, oil pump plunger, oil pump idler gear, oil pump drive chain, and oil pump sprocket. ASSEMBLY COVERAGE CLASS: drive gear key, oil pump screen, oil suction manifold, engine oil pump rotor, engine oil pump drive shaft, oil drain valve, power plant piston cooling valve; **housing/cover(s):** oil pump screen oil pump cover, engine oil pump cover, oil strainer cover; **gasket(s):** \*oil pump body gasket, \*oil pump cover gasket, \*manifold gasket, \*oil pressure regulator valve gasket, \*oil pump assembly gasket, \*oil pump inlet tube gasket, \*outlet pipe oil pump gasket, \*oil galley pipe gasket; **seal(s):** \*oil pump screen mounting o-ring, \*piston cooling nozzle o-ring, \*oil pump inlet tube o-ring, \*oil pump pickup tube o-ring, and \*oil pump seal. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: clip(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), adapter/flange/mounting plate(s), pipe(s)/hose(s), mounting hardware, nut(s), bolt(s), and washer(s).
- 9. OIL FILLER AND LEVEL INDICATOR ASSEMBLY (045-010):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: engine oil dipstick tube, oil filler tube, oil filler neck, oil check & fill assembly extension, oil heater dipstick, oil level dipstick, dipstick blade, oil filler tube cap, engine oil fill port cover; **gasket(s):** \*oil filler tube cap gasket, \*oil filler tube mounting gasket, \*oil fill tube gasket; **seal(s):** \*dipstick tube o-ring, \*oil filter tube o-ring, \*oil fill cap o-ring, and \*engine oil level dipstick seal. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: strap, guide, security cable, hook, valve, strainer, wiring, spring(s), fitting(s),



snap ring(s), clip(s), clamp(s), pin(s)/dowel(s), shim(s)/spacer(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

- 10. OIL TEMPERATURE REGULATOR ASSEMBLY (045-012):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: engine oil cooler, oil cooler element, oil cooler piston, oil cooler plunger, oil control thermatic valve, oil cooler bypass valve, secondary oil filtration check valve, oil cooler disc, oil cooler module; **housing/cover(s):** oil cooler housing, oil cooler oil inlet housing, thermatic oil control valve housing, oil cooler water inlet housing, oil cooler water outlet housing; **gasket(s):** \*engine oil cooler gasket, \*oil cooler adapter gasket; **seal(s):** \*engine oil cooler o-ring, \*thermatic oil control valve housing seal, \*oil cooler inlet tube seal, \*oil cooler seal, \*oil cooler plug seal, and \*oil cooler relief valve housing seal. PART COVERAGE CLASS: \*piston cooling jet control solenoid and \*oil filter minder sender. PROGRESSIVE ONLY CLASS: clip(s), clamp(s), connector(s), retainer(s), adapter/flange/mounting plate(s), pin(s)/dowel(s), shim(s)/spacer(s), line(s), pipe(s)/hose(s), mounting hardware, nut(s), bolt(s), and washer(s).
- 11. OIL PAN ASSEMBLY (045-013):** SYSTEM COVERAGE CLASS: oil pan assembly and pan baffles. ASSEMBLY COVERAGE CLASS: oil pan adapter, engine oil sump, and engine oil drain valve; **gaskets(s):** \*oil pan adapter, \*engine oil pan drain plug, \*engine oil pan, \*oil pan sump, \*windage tray, \*oil delivery tube, \*oil suction tube; **seal(s):** \*front and rear oil pan seal. PART COVERAGE CLASS: \*oil pan heater wiring. PROGRESSIVE ONLY CLASS: Automatic oil change cylinder, oil pan drain plug, clip(s), clamp(s), retainer(s), adapter/flange/mounting plate(s), pin(s)/dowel(s), shim(s)/spacer(s), line(s), pipe(s)/hose(s), mounting hardware, nut(s), bolt(s), and washer(s).
- 12. ENGINE OVERHAUL KIT (045-019):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: N/A. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: engine overhaul kit.
- 13. ENGINE ASSEMBLY (045-020):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: N/A. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: complete engine assembly.
- 14. ELECTRONIC ENGINE CONTROLS ASSEMBLY (045-021):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: \*electronic control module (ECM), \*idle speed control motor, deceleration valve; **gaskets(s):** \*idle speed control motor gasket, \*electronic engine controls gasket; **seal(s):** \*camshaft position sensor o-ring, \*crankcase pressure sensor mounting o-ring, \*engine position sensor o-ring, \*ambient pressure sensor o-ring, \*engine coolant temperature sensor o-ring, \*engine oil pressure sensor o-ring, \*manifold pressure sensor o-ring, and \*oil breather centrifuge speed sensor o-ring. PART COVERAGE CLASS: \*electronic management system smart junction box, \*electronic distributor unit (EDU), \*air/fuel ratio gauge, \*pressurstat, \*electronic vacuum regulator, \*ECM relay, \*transducer, \*BTM fuel rack solenoid, \*tab/tad solenoid, \*manifold absolute temperature (MAT) sender; **module(s):** \*engine (EIM) interface module, \*knock sensor module, pressure time control module, \*stand-alone real-time (SART) module, \*vehicle personality (VPM) module; **sensor(s):** \*air pressure sensor, \*air/fuel ratio sensor, \*ambient air temperature sensor, \*atmosphere / ambient pressure sensor, \*boost pressure sensor, \*camshaft position sensor, \*camshaft speed sensor, \*compressor inlet sensor, \*crankcase pressure sensor, \*crankshaft speed sensor, \*engine coolant temperature sensor, \*engine oil pressure sensor, \*engine oil temperature sensor, \*engine position/timing sensor, \*exhaust temperature sensor, \*fuel pressure sensor, \*fuel rack position sensor, \*fuel temperature sensor, \*electronic engine controls humidity sensor, \*knock sensor, \*low coolant sensor, \*ECM manifold pressure sensor, \*mass airflow sensor, \*mass air flow (MAF)/intake air temperature (IAT) sensor, \*misfire sensor, \*optimized idle sensor, \*exhaust oxygen sensor, \*wideband oxygen sensor, \*piston coolant sensor, \*oil breather centrifuge speed sensor, \*synchronous reference sensor, \*temperature, cylinder head temperature sensor, \*temperature multiple functions temperature sensor, \*throttle input absolute pressure sensor, \*timing reference sensor, \*vehicle speed sensor; **switch(es):** \*diagnostic switch, \*economy switch, ECU switch, \*thermal override switch, \*thermostat vacuum control switch, \*wide open throttle switch; **wiring:** \*fuel control wiring, \*ambient air temperature sensor harness, \*ECM harness, ambient air temperature sensor jumper harness, \*electronic engine control wiring harness, \*engine air temperature sensor wiring harness, \*engine solenoids/sending units wiring harness, \*transmission wiring harness, and \*engine wiring harness & connectors. PROGRESSIVE ONLY CLASS: ECM cooling plate, ECM and wiring cover(s), powertrain control monitor, powertrain control synchronizer, warning bell, Connector(s)/port(s), clip(s), clamp(s), retainer(s), adapter/flange/mounting plate(s), pipe(s)/hose(s), mounting hardware, nut(s), bolt(s), and washer(s). NON-COVERED CLASS: Software update(s), Calibration file(s), batteries, and filter(s).
- 15. REAR TIMING HOUSING ASSEMBLY(045-022):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: rear timing housing, rear timing housing timing gear inspection plate, and \*rear timing housing gasket. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: /adapter/flange/mounting plate(s), pin(s)/dowel(s), shim(s)/spacer(s), mounting hardware, nut(s), bolt(s), and washer(s).

## ACCESSORIES GROUP

### I. EXPENDABLE ITEMS (053)

- 1. TIRE CHAINS (053-001):** no coverage.

2. **SANDER (053-002):** no coverage.
3. **MATTRESS (053-003):** no coverage.
4. **SAFETY EQUIPMENT (053-004):** no coverage.
5. **VEHICLE MARKINGS (053-005):** no coverage.
6. **TOOLS & DIAGNOSTIC DEVICES (053-006):** no coverage.
7. **EXPENDABLE ITEMS HARDWARE (053-007):** no coverage.
8. **HOSES & TUBINGS & FITTINGS (053-008):** no coverage.
9. **STEEL STOCK (053-009):** no coverage.
10. **SANDING/GRINDING SUPPLIES (053-010):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: N/A. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: sandpaper & discs. NON- COVERED: body filler, fiberglass, resin, hardeners, patch kits.
11. **SUPPLIES (053-011):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: N/A. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: cleaning supplies, concrete cleaner, rubber gloves, disposable gloves, cloth gloves, shop rags, cleaning cloths, cable ties, disposable seat covers, and disposable floor mats. NON- COVERED: boots, boxes, brushes, buckets, leather/mechanic/welding gloves, soap/hand cleaner, welding helmet, hard hat, mops, pallets, ear plugs, protective clothing/uniforms.
12. **ALUMINUM STOCK (053-012):** no coverage.
13. **WOOD (053-013):** no coverage.
14. **ENVIRONMENTAL (053-014):** no coverage.
15. **WELDING SUPPLIES (053-015):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: N/A. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: welding rod, wire, and cable. NON- COVERED: welding torch, welding torch tip, welding gauge, welding gloves, and welding helmet.
16. **GENERAL USE BEARING (053-016):** no coverage.
17. **GENERAL USE COMPONENTS ELECTRICAL (053-017):** no coverage.
18. **GLASS STOCK (053-018):** no coverage.
19. **GENERAL USE SEAL (053-019):** no coverage.
20. **COMPOUND BOARD (053-020):** no coverage.
21. **REAR WINDOW DEFOGGER (053-021):** no coverage.
22. **POSITION & APPLICATION NOT SPECIFIED ON VEHICLE BEARINGS (053-022):** no coverage.
23. **HARDWARE GRADE CHAIN (053-023):** no coverage.
24. **STEP GRATE (053-024):** no coverage.
25. **MANUAL (053-100):** no coverage.
26. **VEHICLE PAINT & PRESERVATIVES (053-998):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: N/A. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: touch up paint for frame rail, engine, drive shaft, cross member, fuel tank, axles, transmission, exhaust system, and suspension. NON- COVERED: body paint, cab paint, fender paint, grill paint, lacquer thinner, rubbing compound, paint remover, plastic prep, masking paper, additive, hardener, activator, and accelerator.
27. **VEHICLE FLUIDS, LUBRICANTS, GASES, & PARTICULATES (053-999):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: N/A. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: oil/water/fuel analysis kit, coolants (OAT, HOAT, IAT, NOAT), degreaser, Fluid (suspension, transmission, differential, DEF, belt tensioner, final drive, hydraulic brake/clutch/lift, power steering, starting, transfer case), engine flush, cooling system flush, HVAC flush, power steering flush, fuel flush, fuel (gas, diesel/biodiesel, propane/natural gas), grease, lubricant, (graphite, synthetic, multi-purpose), leak detector (oil/fuel/coolant/refrigerant), oil absorbent, oil (engine, axle, gear, transmission, hydraulic, steering), air conditioning refrigerant, gasket remover, tape (adhesive, aluminum, duct, electrical), coolant/DEF test strips, belt dressing, and cleaner (brake/parts, degreaser, electrical, fuel injector, radiator). NON- COVERED: acetylene, activator, additive(s), adhesive, argon, butane, bonding/retaining compound, deicer, dissolver, disinfectant, epoxy, filler, rubber glue, kerosene, stop leak, glass/tire marker, nitrogen, air compressor oil, bar/chain oil, cutting oil, air tool oil, oxygen, polish, adhesive/bug/tar/graffiti remover, fabric/vinyl/leather/windshield repair kits, sealer/sealants, tapes, tire patch, floor wax.

**V. PRO PLAN:** (includes parts listed in Essential Plan)

**ENGINE/MOTOR SYSTEMS GROUP**

**A. EXHAUST SYSTEM (043)**

1. **EMISSION CONTROLS (043-001):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: air injection reactor pump, air injection reactor pump pulley, rear pump bearing, end pump vane and bearing, center pump vane and bearing, back pressure valve plug bushing, clean gas induction (CGI) cooler, EGR cooler, EGR coolant diverter, emission controls catalytic converter, EGR cooler mixing chamber, connecting EGR and mixing chamber double walled venturi, evaporative emission

control canister, heat exchanger, EGR heater plate, \*EGR actuator rod lever, compressed air distribution manifold, EGR venturi, EGR venturi pipe, EGR hydraulic bellows, EGR bellows, aftertreatment to EGR connector bellows, EGR valve pressure control valve, EGR (mixer valve) valve, air injection reactor pump pressure relief valve, exhaust back pressure solenoid valve, air manifold check valve, early fuel evaporator vacuum check valve, EGR vacuum check valve, air intake control valve, air intake bleed valve, back pressure valve, EGR bypass valve, early fuel evaporation valve, vapor canister purge regulator valve, thermal management valve; **housing/cover(s)**: EGR valve housing, EGR valve cover, pump housing cover; **gasket(s)**: \*EGR valve adapter gasket, \*air injection system air bypass valve gasket, \*air injection system air pump gasket, \*catalytic converter gasket, \*air injection system check valve gasket, \*air injection system control valve gasket, \*EGR cooler gasket, \*fuel cooler gasket, \*EGR heat exchanger gasket, \*EGR valve gasket, \*clean gas induction (CGI) exhaust pipe to cooler gasket, \*back pressure valve flexible pipe gasket, \*EGR control valve flexible pipe gasket, \*exhaust system particulate filter gasket, \*clean gas induction (CGI) pipe to mixer valve/housing gasket, \*EGR vacuum control solenoid gasket, \*EGR tube gasket; **seal(s)**: \*air pump connecting pipe seal, \*EGR cooler connector seal, \*exhaust system plumbing airline, hose, tube o-ring, \*clean gas induction (CGI) coolant hose fitting o-ring, \*clean gas induction (CGI) mounting o-ring, \*EGR coolant line seal, \*EGR cooler hose seal, \*EGR venturi pipe sealing ring. **PART COVERAGE CLASS**: \*exhaust pressure regulator, \*air injection system air pump relay, \*EGR pressure switch, \*vapor canister purge vacuum switch; **module/controller(s)**: \*back pressure actuator controller, \*EGR (VPOD) controller, \*emission maintenance warning module; **wiring**: \*EGR valve harness, \*EGR pressure sensor wiring harness; **actuator(s)**: \*early fuel evaporator valve actuator, \*EGR valve actuator, \*EGR valve actuator rod, \*EGR valve manifold tuning valve actuator; **sensor(s)**: \*CGI cooler combustion air delta sensor, \*back pressure valve pressure sensor, \*back pressure valve temperature sensor, \*exhaust back pressure sensor, \*centrifugal crankcase oil separator (CCOSS) sensor, \*clean gas induction (CGI) cooler pressure sensor, \*clean gas induction (CGI) cooler temperature sensor, \*delta p sensor, \*EGR monitor sensor, \*EGR position sensor, \*EGR pressure sensor, \*EGR temperature sensor, \*nitrogen oxide (NOx) sensor; **solenoid(s)**: \*air injection system control solenoid, \*EGR solenoid, \*EGR vacuum control solenoid, \*vapor canister purge solenoid, \*vapor canister vent solenoid. **PROGRESSIVE ONLY CLASS**: belts, air filter(s), centrifugal crankcase oil separator (CCOS), duct(s), heat shield, insulator(s), decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

**2. EXHAUST MANIFOLD (043-002)**: **SYSTEM COVERAGE CLASS**: N/A. **ASSEMBLY COVERAGE CLASS**: exhaust manifold, manifold heat control valve thermostat, manifold heat control valve, manifold heat control valve shaft bushing; **gasket(s)**: \*exhaust manifold gasket, \*exhaust manifold sleeve gasket, \*manifold heat control valve gasket; **seal(s)**: \*exhaust manifold slip joint repair seal, and \*exhaust manifold seal ring. **PART COVERAGE CLASS**: expansion flexible pipe (slip joint), and exhaust manifold sleeve. **PROGRESSIVE ONLY CLASS**: pyrometer (sleeve, wiring, amplifier module), slip joint cover, manifold extension, decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

**3. MUFFLER ASSEMBLY (043-003)**: no coverage available.

**4. TURBOCHARGER ASSEMBLY (043-004)**: **SYSTEM COVERAGE CLASS**: N/A. **ASSEMBLY COVERAGE CLASS**: turbocharger, turbocharger main body, turbocharger turbine, turbocharger compressor wheel, turbocharger turbine wheel, turbocharger drive shaft, turbocharger drive shaft bearing, turbocharger nozzle, turbocharger impeller, turbocharger diffuser, turbocharger bearing, compressor side turbocharger thrust washer, variable geometry turbo (VGT) valve, turbocompound turbine gear, turbocompound transmission, turbocompound transmission shaft shaft, turbocompound transmission clutch, \*variable pressure output device (VPOD), \*turbocharger boost control solenoid valve, isolation chamber, air cylinder, turbocharger control lever, \*air pressure solenoid valve, \*turbocompound solenoid valve; **housing/cover(s)**: turbocharger drive shaft bearing housing, turbocharger collector housing, turbocharger compressor housing, turbocharger turbine housing, turbocharger bearing drive shaft housing; **gasket(s)**: \*turbocharger coolant line gasket, \*wastegate flexible pipe gasket, \*air intake housing gasket, \*turbocharger inlet gasket, \*turbocharger oil line gasket, \*turbocharger oil drain tube gasket, \*turbocharger to exhaust manifold gasket, \*turbocharger wastegate actuator gasket, \*air check valve mounting gasket, \*turbocharger mounting gasket; **seal(s)**: \*turbocharger compressor seal, \*turbo return coolant pipe seal, \*turbo supply coolant pipe seal, \*turbocharger turbine seal, \*turbocompound exhaust line sealing ring, \*turbocharger drive shaft bearing housing o-ring, \*turbocharger oil drain tube o-ring, \*oil line o-ring, \*turbocharger oil supply tube o-ring, \*plate o-ring, \*turbocharger diffuser plate o-ring, \*turbocompound o-ring, and \*seal sleeve. **PART COVERAGE CLASS**: turbocharger wastegate, \*turbocharger wastegate actuator, \*turbocharger actuator cooler, turbocharger wastegate control valve, turbocharger bypass valve, turbocharger air check valve, \*variable nozzle turbine turbocharger actuator, \*turbocharger VGT vane actuator, \*turbo actuation (SRA) control module, \*turbocharger wastegate control module, \*fuel pump switch, turbocharger dump gate boost control, \*turbocharger boost pressure safety switch, \*turbocharger air pressure regulator,

\*turbocharger compressor bypass valve solenoid, \*check valve w/sensor (between BVU and turbocompound); **sensor(s)**: \*turbocharger boost sensor, \*pre-turbo pressure sensor, \*turbocharger temperature sensor, \*turbocharger turbine speed sensor, \*turbocharger wastegate sensor, \*turbocharger vane position sensor; **wiring**: \*turbocharger wiring. **PROGRESSIVE ONLY CLASS**: air/oil filter(s), turbo resonator, turbo charger to precooler bellows, heat shield(s), banjo bolt sealing rings, rotor and rod cover(s), rotor cover bushings, decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

**5. EXHAUST BRAKE (043-005)**: no coverage available.

**6. EXHAUST AFTER-TREATMENT DEVICES (043-006)**: **SYSTEM COVERAGE CLASS**: DPF/SCR base box (one box), diesel oxidation catalyst (DOC) module, exhaust aftertreatment particulate trap (DPF) module, exhaust aftertreatment inlet module, exhaust aftertreatment outlet module, aftertreatment regeneration device (ARD) head, exhaust burner, exhaust burner fuel nozzle, fuel control module valve, hydrocarbon (HC) doser valve injector (7th injector), doser valve assembly, doser pump, doser valve metering unit valve assembly, fuel control dosing injection module, exhaust aftertreatment device heater element, aftertreatment device dosing injector manifold, doser valve fuel cut off valve, fuel intake module air shut off valve. **ASSEMBLY COVERAGE CLASS**: exhaust aftertreatment devices catalytic converter, aftertreatment device exhaust pipe bellows, air intake throttle valve; **housing/cover(s)**: exhaust aftertreatment device cover, doser valve main housing; **gasket(s)**: \*diesel particulate filter adapter gasket, \*doser injector gasket, \*doser valve gasket, \*exhaust aftertreatment body gasket, \*aftertreatment regeneration device (ARD) head gasket, \*diesel particulate filter jumper harness gasket, \*exhaust aftertreatment devices particulate filter gasket; **seal(s)**: \*exhaust aftertreatment pressure sensor o-ring, \*aftertreatment regeneration device (ARD) head seal, \*doser valve copper sealing ring. **PART COVERAGE CLASS**: \*diesel particulate filter sensor box, \*regeneration system solenoid, \*exhaust aftertreatment regeneration switch; **module(s)**: \*exhaust aftertreatment aftertreatment control module (ACM), \*ammonia control module, \*exhaust aftertreatment diagnostic module, \*exhaust aftertreatment remote display module, \*diesel exhaust fluid heater control module, \*exhaust aftertreatment temperature sensor interface module, \*regeneration module; **sensor(s)**: \*diesel particulate filter ammonia sensor, \*ASM sensor, \*upstream DPF temperature sensor, \*exhaust aftertreatment particulate trap differential pressure sensor, \*exhaust gas temperature sensor, \*aftertreatment regeneration flame detection temperature device sensor, \*exhaust aftertreatment fuel control module sensor, \*diesel oxidation catalyst (DOC) gas temperature sensor, \*particulate soot sensor, \*diesel oxidation catalyst (DOC) pressure sensor, \*doser valve pressure sensor, \*exhaust aftertreatment pressure sensor, \*catalytic converter temperature sensor; **wiring**: \*doser system spark plug coil, \*aftertreatment module to sensor wiring harness, \*exhaust aftertreatment device wiring harness, \*exhaust gas temperature sensor harness, \*diesel particulate filter jumper harness, \*diesel particulate filter plug harness, \*doser system plug wire. **PROGRESSIVE ONLY CLASS**: catalytic converter anti theft device, junction box, junction box beam, heat shield, insulator(s), doser filter, air filter, spark plug, decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

**7. SELECTIVE CATALYTIC REDUCTION SYSTEM (SCR) (043-007)**: **SYSTEM COVERAGE CLASS**: selective catalytic reduction (SCR) module, one-way urea pump inlet check valve, DEF regulator valve diaphragm, metering device diffuser heating element, burner fuel injector nozzle, metering device doser heater, catalytic reduction actuator pump, DEF coolant pump, coolant manifold, module pump, DEF tank sending unit/pump pump reservoir bladder, pump pressure reservoir, DEF tank header, DEF tank heater, diffuser heating element, tank heater plumbing manifold, DEF metering device, DEF doser valve injector, DEF injection nozzle, DEF injection awning, pressure regulating valve, air pressure limiter solenoid valve, DEF tank coolant solenoid valve, exhaust aftertreatment solenoid valve, engine control actuator metering valve, exhaust aftertreatment overflow valve, pump pneumatic switching valve, DEF pump pressure relief valve, and DEF tank water supply valve. **ASSEMBLY COVERAGE CLASS**: SCR air control unit, SCR catalytic converter, combustion chamber, engine control actuator solenoid valve; **housing/cover(s)**: DEF housing assembly, aftertreatment control module cover, DEF tank cover, DEF metering device doser cover, DEF pump cover; **gasket(s)**: \*DEF doser to exhaust gasket, \*coolant def tank gasket, \*doser valve injector gasket, \*inlet pipe gasket; **seal(s)**: \*air line, hose, tube, plumbing o-ring, \*DEF tank filler neck o-ring, \*DEF tank header o-ring, \*DEF tank heater o-ring, \*DEF tank level sensor o-ring, \*line, hose, tube, plumbing o-ring, \*nitrogen oxide (NOX) sensor o-ring, \*DEF tank cap seal, and \*doser valve injector sealing ring. **PART COVERAGE CLASS**: decomposition pipe, decomposition reactor, NOX reduction agent (hydrolysis/decomp) mixing tube, \*DEF range display, DEF tank filler neck, diesel exhaust fluid tank, \*DEF tank dash fill level gauge, multi-function (temperature, level, quality) DEF tank head, \*DEF tank fill level indicator, \*selective catalytic reduction engine control module (ECM), \*selective catalytic reduction aftertreatment control module (ACM), \*SCR system temperature sensor interface module, \*DEF Heater relay, \*DEF pump switch; **sensor(s)**: \*compensation sensor, \*exhaust soot sensor, \*DEF tank fill level sensor, \*burner flame temperature sensor, \*selective catalytic reduction air intake humidity sensor, \*diesel exhaust system nitrogen oxide (NOX) sensor, \*downstream of catalytic converter NOX sensor,

\*upstream of catalytic converter NOX sensor, \*metering device compressed air pressure sensor, \*input exhaust gas pressure sensor, \*metering device pressure sensor, \*output exhaust gas pressure sensor, \*diesel exhaust fluid (DEF) quality sensor, \*catalytic reduction actuator (Downstream) temperature sensor, \*catalytic reduction actuator (Upstream) temperature sensor, \*diesel exhaust fluid (DEF) temperature sensor, \*SCR system inlet/outlet temperature sensor, \*metering device temperature sensor, \*catalytic reduction actuator temperature/fill level sensor, \*catalytic reduction actuator temperature/moisture sensor; **wiring**: \*selective catalytic reduction exhaust gas aftertreatment wiring, \*nitrogen oxide sensor wiring, \*aftertreatment control module to air control unit wiring harness, \*aftertreatment control module to metering device wiring harness, \*aftertreatment control module to pump wiring harness, \*aftertreatment control module to tank fill level indicator wiring harness, \*aftertreatment control module to tank heater solenoid valve wiring harness, \*DEF system wiring harness, \* DEF tank pump wiring harness, \*tank fill level indicator to tank fill level gauge wiring harness, and \*DEF tank level sensor jumper harness. PROGRESSIVE ONLY CLASS: DEF/burner filter(s), glowplug, screen, shield, splash guard, strainer, vent, decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

## **B. FUEL SYSTEM (044)**

- 1. LIQUID FUEL TANK (044-001):** SYSTEM COVERAGE CLASS: tank to tank fuel transfer pump. ASSEMBLY COVERAGE CLASS: fuel tank, fuel tank filler neck, fuel tank leveling valve, fuel tank selector valve, fuel shut off valve, shut off leveling valve rod, fuel check valve, three-way fuel check valve, fuel breakaway valve, fuel return valve, fuel supply valve, roll over vent valve, fuel tank pick up tube, fuel cooler, fuel tank cooler, fuel accumulator, fuel control rod; **housing/cover(s)**: fuel cooler cover, fuel tank gauge cover; **gasket(s)**: \*fuel tank breather tube gasket, \*fuel tank inlet check valve gasket, \*fuel tank drain plug gasket, \*fuel tank filler neck gasket, \*fuel gauge to tank gasket, \*fuel tank gasket, \*fuel tank cap gasket, \*fuel tank filler neck mounting plate gasket, \*fuel tank roll over protection valve gasket; **seal(s)**: \*fuel tank filler pipe seal, \*fuel line block o-ring, \*fuel line, hose, tube, plumbing o-ring, and \*fuel level sending unit seal. PART COVERAGE CLASS: \*fuel line block, \*fuel pump reservoir module, \*fuel tank fuel level sensor, \*fuel tank vacuum sensor, \*fuel tank gauge wiring harness, and \*fuel tank fuel sending unit pigtail harness. PROGRESSIVE ONLY CLASS: air cleaner, fuel line filter, fuel tank filter, guard, insulator, sight glass, fast fill receiver, fast fill diffuser, fast fill breather, strap, tether, sleeve(s), decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s). NON-COVERED CLASS: skid plate.
- 2. FILTERS (044-002):** no coverage.
- 3. FUEL PUMP (044-003):** SYSTEM COVERAGE CLASS: high pressure fuel pump, electric fuel pump, fuel feed pump, fuel lift pump, injection pump(s), fuel system spill port pump, electric operated priming pump, hand operated priming pump, pump housing, pump head, valve, diaphragm, diaphragm spring, pump body, fuel pump operating rod, fuel manifold, fuel pump distributor, tappet(s), tappet guide(s), tappet roller(s), camshaft, pump stop lever, delivery valve, delivery pump spring, plunger and bushing, injection rack & pinion, injection pump overflow valve, fuel injection nozzle valve, fuel injection nozzle spring, front and rear camshaft bearings, operating shaft assembly bearing, engine fuel pump shaft bushing, shaft assembly bearing, torque cam, delivery valve spring, shaft assembly driven gear, pump gear, clutch and drive assembly drive gear, fuel pump drive gear key, inlet/outlet valve. ASSEMBLY COVERAGE CLASS: tachometer drive gear, fuel pump pulley, fuel pressure relief valve, fuel pressure valve, fast idle air valve, bleed back check valve, aneroid check valve, fuel pump check valve, integrated fuel systems management (IFSM) check valve, fuel blend valve, high pressure fuel pump quality valve, engine governor, governor shaft, governor barrel, governor spring sleeve, governor sleeve assembly bearing, governor plunger, governor barrel plunger, injector pump governor control valve; **housing/case(s)**: governor housing, injector pump housing, spring pack housing; **gasket(s)**: \*injection pump timing gear access cover gasket, \*actuator gasket, fuel pump bowl gasket, \*governor to pump housing cover gasket, \*upper cover gasket, \*engine injector pump end cap gasket, \*fuel injection nozzle gasket, \*fuel line gasket, \*fuel pressure regulator gasket, \*fuel pump cover gasket, \*fuel pump flange or adapter gasket, \*inspection cover gasket, \*liquid gasket, \*hand operated priming pump gasket, \*fuel pump safety cut off switch gasket, \*supply pump gasket, \*valve spring screw gasket, \*injection pump mounting gasket; **seal(s)**: \*fuel injector lines adapter seal, \*front cover seal, \*fuel injection nozzle seal, \*fuel pump body seal, \*governor control valve to transmission case seal, \*airline governor control seal, \*injection pump seal, \*injection pump driveshaft seal, \*closure non-tampering seal, \*fuel injection pump advance piston plug seal, \*pressure valve seal, \*shaft seal, \*throttle shaft seal, \*tach drive seal, \*fuel pump mounting seal, \*fuel line seal, \*injection pump delivery valve o-ring, \*engine, fuel line, hose, tube, plumbing o-ring, \*fuel injector nozzle o-ring, \*fuel pump gear o-ring, \*pulsation damper o-ring, \*throttle shaft o-ring, \*fuel solenoid o-ring / seal, and \*fuel injector nozzle o-ring kit. PART COVERAGE CLASS: \*high pressure fuel rail, fuel system (IFSM) actuator, \*fuel pump controller, \*fuel ratio controller, \*injection activation controls, \*fuel pump solenoid silicon rectifier diode, \*fuel solenoid (FSD) driver, \*fuel pressure regulator, \*cold advance relay, \*fuel pump relay, \*injection pump resistor,

\*puff limiter valve reversing relay, \*fuel system governor servo; **sensor(s)**: \*rail pressure sensor, \*fuel pump speed sensor; **solenoid(s)**: \*cold advance solenoid, \*fuel shut-off solenoid, \*hi-speed solenoid, \*speed solenoid; **switch(s)**: \*fast idle switch, \*fuel pressure switch, \*governor switch, \*fuel system inertia switch, \*overspeed switch, \*reprime pump switch, \*fuel pump safety cut-off switch; **module(s)**: \*governor control module, \*fuel hot start module, \*fuel pump module, \*fuel system (IFSM) module, \*motor control (MCM) module; **wiring**: \*fuel pump wiring harness, and \*flow sensor harness. **PROGRESSIVE ONLY CLASS**: Timing Advance Unit, fuel pump drive belt, fuel filter(s), fuel strainer element, decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

**4. MECHANICAL INJECTORS (044-004)**: **SYSTEM COVERAGE CLASS**: fuel pump regulator, mechanical fuel injector, injector barrel & plunger, injector plunger & bushing, injector pin, injector rack & pinion, injector tip valve spring, injector spray tip, injector seat, injector rack tube and arm, injector control tube lever, and fuel injector cup. **ASSEMBLY COVERAGE CLASS**: injector lines protection cover; **gasket(s)**: \*fuel inlet tube gasket, \*injector tip gasket, \*injector leak off pipe gasket; **seal(s)**: \*injector nozzle holder seal felt, \*injector cup o-ring, \*injector fuel passage o-ring, and \*injector assembly seal. **PART COVERAGE CLASS**: N/A. **PROGRESSIVE ONLY CLASS**: injector filter, decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

**5. CARBURETOR (044-005)**: no coverage.

**6. GASOLINE ENGINES GOVERNOR (044-006)**: **SYSTEM COVERAGE CLASS**: N/A. **ASSEMBLY COVERAGE CLASS**: governor diaphragm, governor thrust washer, governor operating shaft, operating shaft bearing, shaft weight bearing, weight, governor control valve; **gasket(s)**: \*adjusting screw gasket, \*governor mounting gasket; **seal(s)**: \*governor body dust seal, \*governor locking seal, \*governor operating shaft seal, and \*governor control valve plunger o-ring. **PART COVERAGE CLASS**: N/A. **PROGRESSIVE ONLY CLASS**: governor drive belt, decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

**7. THROTTLE CONTROLS (044-007)**: no coverage.

**8. ENGINE SHUTDOWN (044-008)**: no coverage.

**9. NON-ELECTRICAL FUEL HEATER (044-009)**: no coverage.

**10. PROPANE / NATURAL GAS CONVERTER (044-010)**: **SYSTEM COVERAGE CLASS**: N/A. **ASSEMBLY COVERAGE CLASS**: regulator (primary and secondary) assembly, regulator governor, diaphragm(s), regulator spring(s), relief valve, lockout valve, liquid petroleum overfill pop-off valve, liquid petroleum overfill splitter valve, liquid propane scavenger pump, liquid propane secondary fuel pump, primer plunger assembly, primer assembly coil, primer base plate, fuel injector assembly, heat exchanger body, throttle chamber assembly, tar trap drain valve, vacuum lock spring; **housing/cover(s)**: back cover, exhaust manifold cover, front cover, primer cover; **gasket(s)**: \*back cover gasket, \*front cover gasket, \*primary gasket, \*injector sensor assembly gasket, \*throttle chamber gasket; **seal(s)**: \*injector intake housing filter o-ring, \*injector assembly plate o-ring, \*propane/natural gas solenoid o-ring, \*gas manifold seal, \*lockout valve seal, and \*injector assembly plate seal. **PART COVERAGE CLASS**: \*liquid petroleum (LPCM) control module, \*liquid petroleum (LPDM) driver module, \*lockout valve safety switch, \*primer assembly solenoid, \*propane/natural gas solenoid, \*fuel pressure sensor, \*injector sensor; **wiring**: \*governor wiring, and \*control module to driver module wiring harness. **PROGRESSIVE ONLY CLASS**: filter(s), bumper, linkage bushing, holder, decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

**11. SPEED CONTROL SYSTEM (044-011)**: no coverage.

**12. GASEOUS FUEL TANK (044-012)**: **SYSTEM COVERAGE CLASS**: N/A. **ASSEMBLY COVERAGE CLASS**: gaseous fuel tank, fuel tank filler neck, gaseous fuel line check valve, gaseous fuel pressure relief valve, gaseous fuel tank shut off valve, gaseous fuel tank vapor shut off valve, gaseous fuel line fill valve; **gasket(s)**: \*gaseous solenoid gasket; **seal(s)**: \*gaseous fuel line o-ring, \*gaseous fuel line seal. **PART COVERAGE CLASS**: \*gaseous fuel tank pressure gauge, \*gaseous fuel tank knob, \*gaseous fuel regulator, \*CNG receptacle starter interlock switch, \*gaseous fuel leak detection sensor, \*fuel line solenoid valve, \*fuel tank solenoid valve; **wiring**: \*leak detection overhead cab wiring harness, \*leak detection power distribution wiring harness, and \*leak detection sensor cable wiring harness. **PROGRESSIVE ONLY CLASS**: Gaseous fuel vaporizer (heater), filter, vent tube, cap, cover, panel, shield, leak detection buzzer, display monitor, decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s). **NON-COVERED CLASS**: lights.

**13. ELECTRONIC INJECTORS (044-014):** SYSTEM COVERAGE CLASS: electronic injector assembly (sequential central port injection (SCPI) injector/central port injection (CPI) injector), fuel injector body, fuel injector sleeve, cold start valve injector, fuel control valve, fuel injection oil control valve, and fuel injection STC oil control valve. ASSEMBLY COVERAGE CLASS: fuel injection crossover lever, high pressure (HEUI) oil pump, high pressure regulator oil pump, high pressure (HEUI) oil manifold, high pressure oil pump check valve, high pressure (HEUI) oil rail, pressure regulator valve oil reservoir, injection pressure regulator (IPR) valve, fuel injector pressure limiting valve; **gasket(s):** \*cold start valve injector gasket, \*fuel injector gasket; **seal(s):** \*electronic injector o-ring, \*injection pressure regulator o-ring, \*high pressure oil pump o-ring, and \*electronic injectors seals. PART COVERAGE CLASS: \*fuel injector (FICM) control module, \*fuel injection module, \*injector driver (IDM) module, \*electronic drive unit relay, \*injection control relay; **sensor(s):** \*injection control pressure (ICP) sensor, \*STC viscosity sensor; **wiring:** \*injection pressure regulator (IPR) harness, \*external injector harness, \*injector wiring, \*electronic injectors wiring harness, and \*fuel charging wiring harness. PROGRESSIVE ONLY CLASS: air signal Attenuator, fuel injector holder, decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

**14. ELECTRICAL FUEL HEATER (044-015):** no coverage.

**15. EVAPORATIVE EMISSION CONTROL (044-016):** no coverage.

### C. POWER PLANT SYSTEM (045) (see Essential Plan for additional coverage)

**1. CYLINDER HEAD ASSEMBLY(045-007):** SYSTEM COVERAGE CLASS: \*engine cylinder head, \*intake valve guide(s), \*exhaust valve guide(s), \*intake valve seat(s), \*exhaust valve seat(s), \*exhaust valve guide bushing(s), \*intake valve guide bushing(s), \*intake/exhaust valve sleeve(s), \*injector tube(s), \*injector nozzle holder sleeve(s). ASSEMBLY COVERAGE CLASS: \*head assembly cover, \*cylinder head cover base, \*exhaust regulator valve, \*jet valve, \*cylinder head timing gear inspection plate; **gasket(s):** \*engine cylinder head gasket, \*cylinder head cover gasket, \*oil separator mounting gasket; **seal(s):** \*cylinder head water seal, \*cylinder head seal, \*fuel crossover o-ring, \*injector cup seal, and \*steam crossover seal. PART COVERAGE CLASS: \*exhaust valve compression release control knob, \*exhaust regulator valve actuator, and \*exhaust regulator valve control module. PROGRESSIVE ONLY CLASS: adapter/flange/mounting plate(s), pin(s)/dowel(s), shim(s)/spacer(s), pipe(s)/hose(s), mounting hardware, nut(s), bolt(s), and washer(s).

## VI. ELITE PLAN: (includes parts listed in Essential and Pro Plans)

### CAB, CLIMATE CONTROL, INSTRUMENTATION, & AERODYNAMIC DEVICES GROUP

#### A. HVAC (001)

**1. AIR CONDITIONING (001-001):** SYSTEM COVERAGE CLASS: liquid vacuum motor, program drive motor; **HVAC compressor:** piston, piston ring, pressure relief valve, rotor, shaft, shell, eccentric, needle thrust bearing, thrust bearing race, air conditioning compressor driven pulley; **HVAC evaporator:** gear motor, evaporator core, vacuum reservoir, register, probe, suction throttling valve piston and diaphragm, front & rear reed valves suction valve, compression (CVV/cooling coil valve) spring, tension (CVV/cooling coil valve) spring, evaporator thermostat; **HVAC condenser:** coil (core), plenum, condenser, condenser fan motor and blade, air conditioner condenser valve; **HVAC Drier/accumulator:** dehydrator assembly (drier) receiver, and air conditioning accumulator. ASSEMBLY COVERAGE CLASS: defrost head assembly, defrost lever, A/C belt tensioner pulley, blower motor resistor block and diode, air conditioner temperature control thermostat, heater and A/C thermistor, vacuum (auto) regulator, air discharge nozzle, air conditioning muffler assembly; **valve(s):** HVAC case drain valve, vacuum valve vacuum selector valve, vacuum temperature valve (valve-program vacuum), programmer vacuum valve, air inlet door vacuum control valve, radiator core thermal vacuum valve, heater core thermo vacuum valve, low pressure valve, tank vacuum & check valve assembly, vacuum check valve, temperature control valve, air conditioner hose core valve, heater and A/C mode valve, fresh air recirculation valve, thermal expansion (to junction block) valve, evaporator thermal expansion valve, vacuum power servo valve; **housing/cover(s):** air inlet case, defroster & air conditioning case, cool pack case, plenum blower case, fresh/recirculated air housing, blower motor housing, bottom blower housing, middle blower housing, top blower housing, programmer housing, defroster housing, HVAC housing; A/C cover, air conditioner hose cover, blower housing cover, air inlet case cover, air conditioner condenser cover, front engine compartment control assembly cover, suction crossover cover, evaporator service cover; **gasket(s):** \*blower case gasket, \*blower motor gasket, \*case cover gasket, \*cores barrier gasket, \*blower motor cover gasket, \*duct gasket, \*evaporator case gasket, \*expansion valve gasket, \*motor mount gasket, \*expansion valve mounting plate gasket, \*condenser mounting gasket, \*HVAC compressor pressure relief valve gasket, \*receiver drier gasket; **seal(s):** \*A/C compressor o-ring, \*A/C system, air line, hose, tube, plumbing o-ring, \*discharge crossover tube o-ring, \*A/C general o-ring, \*oil pickup tube o-ring, \*refrigerant line, hose, tube, \*plumbing o-ring, \*shaft seat retainer o-ring, \*shell to head o-ring, \*case to dash panel seal, \*air conditioning

compressor shaft seal, \*evaporator center seal, \*evaporator plate seal, \*evaporator tab seal, \*A/C system heater plate seal, \*compressor shaft seat seal, \*upper mounting seal, \*HVAC case seal, \*air conditioner compressor seal, \*air conditioning condenser seal, \*expansion valve seal, \*air compressor clutch field coil seal, and \*air conditioning refrigerant line seal. **PART COVERAGE CLASS:** \*breath level aspirator, \*actuator insert, \*selenium rectifier, \*A/C junction block, \*temperature control regulator, \*solution throttling valve control cable, \*rotary actuator, ambient switch & sensor assembly, \*circuit board & amplifier assembly, \*air conditioning wiring circuit breaker, \*blower motor switch resistor, \*programmer resistor board assembly, \*vacuum (auto) restrictor, temperature control rheostat, \*A/C compressor sender, \*compressor clutch solenoid, \*A/C condenser motor solenoid, \*air conditioner pressure transducer, \*vacuum transducer; **module(s):** \*electronic cold control, \*heater & air conditioning control, \*automatic temperature control, \*engine compartment circuit control, \*air conditioning diagnostic control module, \*bunk control module, \*linear power module, \*air conditioner power control (PCM) module; **relay(s):** \*blower motor relay, \*compressor clutch relay, \*air conditioning condenser fan relay, \*low pressure relay, \*master relay, \*air conditioning wide open throttle cutoff relay; **switch(es):** \*clutch & blower combination switch, \*compressor clutch shut-off switch, \*air conditioning blower selector switch, \*auto selector switch, \*blower motor selector switch, \*electrical (vacuum-auto) master switch, \*idle speed-up switch, \*A/C damper door switch, \*A/C thermostat switch, \*bi-level boost switch, \*air conditioning binary switch, \*blower motor switch, \*A/C motor blower speed switch, \*air conditioning compressor clutch switch, \*condenser fan switch, \*freeze contact switch, \*high pressure switch, \*low pressure switch, \*A/C compressor master on-off switch, \*A/C compressor micro switch, \*oil pump pressure switch, \*HVAC recirculation switch, \*refrigerant containment switch, \*air conditioner rocker switch, \*mode control rotary switch, \*condenser overheat shutdown switch, \*evaporator temperature switch, \*thermal limiter switch, \*A/C compressor time delay switch, \*trinary switch, \*air conditioning wide open throttle cutoff switch, \*thermostatic switch; **sensor(s):** \*HVAC air quality sensor, \*air conditioning compressor RPM sensor, \*condensate sensor, \*A/C compressor discharge sensor, \*humidity sensor, \*air conditioning refrigerant sensor, \*air conditioning refrigerant temperature sensor, \*sunload sensor, \*evaporator temperature sensor, \*duct sensor assembly, \*in cab sensor assembly; **wiring:** \*roof mounted condenser wiring, \*air conditioning wiring harness, \*air conditioner automatic shutdown wiring harness, \*blower motor wiring harness, \*HVAC wiring harness, and \*receiver/dehydrator harness. **PROGRESSIVE ONLY CLASS:** belt(s), filter(s), knob(s), door(s), duct(s), vent(s), grille(s), louver(s), cable(s), heatshield, insulator, screen(s), shroud(s), sight glass, decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

- 2. HEATING & VENTILATING (001-002):** **SYSTEM COVERAGE CLASS:** heater defrost head assembly, heater motor and blower, heater motor spring, blower motor brush set, motor brush spring, heater motor stator, heater fan, fan motor bearing, heater & defroster blower motor, blower wheel, motor armature, stepper motor, heater plumbing booster pump, HVAC system temperature door cam assembly, heater & ventilator vacuum diaphragm, and heater plumbing manifold. **ASSEMBLY COVERAGE CLASS:** cab pressurization filter pump, heater air baffle, heater core check valve, HVAC system vacuum check valve, HVAC system heater core, air intake door lever, air inlet plenum, heater door shaft, heater water shut-off valve, vacuum tank, heater water temperature control thermostat, control panel assembly vacuum on-off valve, heater coolant flow control valve, heater circuit fill valve, water control valve, duct drain valve; **housing/cover(s):** heater motor housing, top housing, fresh air vent handle cover, heater core cover, heater air distributor case, blower & air inlet case, heater core case; **gasket(s):** \*heater core case gasket, \*heater control valve gasket, \*heater motor to housing gasket, \*heater core tube gasket; **seal(s):** \*fresh air ventilator door seal, \*heater air door seal, \*side heater control seal, \*upper heater core seal, \*heater housing to dash panel seal, \*HVAC heater plate seal, \*blower motor mounting seal, \*heater tube seal, \*cab heater system, \*water line, hose, tube, plumbing o-ring. **PART COVERAGE CLASS:** \*door actuator motor, \*fresh air door actuator, \*circuit breaker, \*heater blower motor resistor, \*heater control valve solenoid; **module/control(s):** \*heater control module, \*heater coolant flow control, \*fresh air ventilator door control, \*sleeper heater slide control, \*dash heating control assembly, \*blower control module; **relay(s):** \*heater blower motor relay, \*heater delay relay; **switch(es):** \*heater motor blower speed switch, \*defroster switch, \*fresh air door switch, \*heater control switch, \*heater/defroster master on-off switch; **sensor(s):** \*heater core temperature sensor; **wiring:** \*main heater assembly wiring harness. **PROGRESSIVE ONLY CLASS:** precleaner, belt(s), filter(s), knob(s), door(s), duct(s), vent(s), grille(s), louver(s), cable(s), heatshield, insulator, screen(s), shroud(s), sight glass, decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
- 3. SELF-POWERED AUXILIARY HEATING AND COOLING (001-003):** **SYSTEM COVERAGE CLASS:** **HVAC compressor:** compressor, compressor drive motor, compressor shut-off valve; **HVAC evaporator:** blower control unit evaporator, evaporator motor brush; **HVAC condenser:** condenser, condenser motor brush, condenser motor, cooling loop condenser fan; **HVAC Drier/accumulator:** accumulator; **HVAC Heater:** heater core, heat exchanger, \*fuel metering pump, \*dosing pump, \*air



combustion blower, \*blower, burner, fuel check valve, \*fan, fuel nozzle, fuel pick up pipe, \*water pump, and \*heater igniter. **ASSEMBLY COVERAGE CLASS:** storage cooler coolant pump, auxiliary booster pump, auxiliary heater coolant recovery tank, \*HVAC thermistor, \*auxiliary heater thermostat, \*HVAC thermostat, \*storage cooler thermostat; **valve(s):** A/C bypass valve, storage cooler expansion valve, \*auxiliary HVAC unit water supply solenoid valve; **housing/cover(s):** air handler housing, power pack housing, auxiliary heater base cover, auxiliary heater blower cover, auxiliary heater burner cover, A/C condenser cover, HVAC control box cover, auxiliary heater duct cover, auxiliary heater fuel metering pump cover, self-powered HVAC separator cover; **gasket(s):** \*auxiliary heater gasket; **seal(s):** \*auxiliary heater glow plug seal ring, \*auxiliary heater air intake tube seal, \*auxiliary heater burner seal, \*auxiliary heater mounting seal, \*shaft, auxiliary A/C compressor shaft seal, \*auxiliary heater system, \*water line, hose, tube, plumbing o-ring, and \*auxiliary heater coolant pump o-ring. **PART COVERAGE CLASS:** \*capacitor, \*auxiliary heater timer, \*refrigerated cooling loop, \*sleeper heat exchanger driver, \*air handler mode door actuator motor, \*auxiliary heater series resistor, \*auxiliary heater terminal; **module/control(s):** \*self-powered control module, \*self-powered A/C control panel, \*auxiliary heater control unit, \*storage cooler control unit, \*self-powered compressor controller; **relay(s):** \*auxiliary Heater relay, \*auxiliary HVAC cool relay, \*auxiliary HVAC cool relay socket, \*auxiliary HVAC voltage regulator relay; **switch(es):** \*auxiliary heater fan switch, \*high pressured A/C switch, \*auxiliary heater inertia switch, \*low pressure A/C switch, \*storage cooler rocker switch, \*auxiliary heater thermal cutout safety switch, **sensor(s):** \*air handler temperature sensor, \*auxiliary heater temperature sensor, \*auxiliary heater flame sensor; **wiring:** \*auxiliary heater glow plug wiring harness, \*auxiliary heater assembly main wiring harness, \*auxiliary battery to ground cable, \*negative/positive auxiliary battery jumper cable, \*auxiliary battery separator cable, \*starter battery separator cable, \*auxiliary heater fuel pump harness, \*self-powered power pack harness, \*A/C harness/connector, and \*storage cooler harness/connector. **PROGRESSIVE ONLY CLASS:** power pack inverter/charger, power pack voltage regulator, battery, fuse, glow plug, belt(s), filter(s), knob(s), door(s), duct(s), vent(s), grille(s), louver(s), cable(s), heatshield, insulator, screen(s), shroud(s), sight glass, decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

- 4. SLEEPER HEATER AND A/C (001-004):** **SYSTEM COVERAGE CLASS:** *heater and AC assembly*; heater core, \*heater and A/C motor, blower wheel, \*blower motor fan booster, and evaporator coil. **ASSEMBLY COVERAGE CLASS:** \*junction block, expansion valve, \*thermistor, heater and A/C drain baffle, \*heater solenoid valve, \*sleeper controls thermostat, auxiliary heater water valve, high side valve core, low side valve core, duct outlet plenum; **housing/cover(s):** heater blower housing, heater and A/C control housing, heater housing, auxiliary heater cover, cab exhauster cover; **gasket(s):** \*blower housing gasket, \*lower core gasket, \*heater assembly cover gasket, \*evaporator gasket, \*heater core gasket, \*seal plate gasket; **seal(s):** \*bulkhead seal, \*evaporator seal, \*heater plate foam seal, \*heater seal, and \*A/C refrigerant o-ring. **PART COVERAGE CLASS:** \*temperature door actuator, \*heater and A/C motor resistor, **module/control(s):** \*heater blower motor speed module, \*auxiliary heater and A/C control panel, \*constant temperature control board; **relay(s):** \*heater and A/C relay; **switch(es):** \*blower motor switch, \*heater and A/C float switch, \*bunk heater rocker switch, \*auxiliary heater rollover switch, \*heater toggle switch; **sensor(s):** \*heater and A/C discharge air sensor; **wiring:** \*auxiliary heater wiring harness, and \*rear heater & A/C wiring harness. **PROGRESSIVE ONLY CLASS:** belt(s), filter(s), knob(s), door(s), duct(s), vent(s), grille(s), louver(s), cable(s), heatshield, insulator, screen(s), shroud(s), sight glass, decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
- 5. DEFROSTER AUXILIARY FAN (001-005):** **SYSTEM COVERAGE CLASS:** N/A. **ASSEMBLY COVERAGE CLASS:** auxiliary fan motor, single defrost fan, dual defrost fan, and fan blade. **PART COVERAGE CLASS:** \*toggle switch, \*motor terminal, and \*fan wiring. **PROGRESSIVE ONLY CLASS:** guard(s), base, shroud(s), sight glass, decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
- 6. CAB COMBINATION UNIT HEATER AND A/C (001-006):** **SYSTEM COVERAGE CLASS:** N/A. **ASSEMBLY COVERAGE CLASS:** N/A. **PART COVERAGE CLASS:** N/A. **PROGRESSIVE ONLY CLASS:** complete heater and A/C assembly.

**B. CAB & SHEET METAL (002):** no coverage.

**C. INSTRUMENTS, GAUGES, WARNING & SHUTDOWN DEVICES, & METERS (003)**

- 1. GAUGES & WARNING DEVICES (003-001):** **SYSTEM COVERAGE CLASS:** N/A. **ASSEMBLY COVERAGE CLASS:** \*interrupt relay battery voltage sensing control, \*differential lockout control valve, and \*fuel gauge sending unit float; **housing/cover(s):** \*gauge colored bulb cover, \*warning control module cover, \*engine coolant temperature sensor cover, \*ammeter shunt cover; **gasket(s):** \*engine oil level sensor gasket, \*instrument panel light bar gasket, \*fuel gauge sending unit gasket; **seal(s):** \*fuel

pressure sender adapter o-ring, and \*sending unit oil pressure sensor o-ring. **PART COVERAGE CLASS:** \*air transducer, \*headlight buzzer alarm, \*ammeter, \*fuel gauge amplifier, \*door chime assembly, \*differential lockout control valve dial, \*fuel gauge dial, \*low air buzzer diode, \*miles per gallon display, \*temperature/compass gauge module display, \*coolant level monitor, \*interface module pressure block, \*warning system component pressurestat, \*printed circuit, \*pyrometer, \*parking brake warning signal, \*primary air pressure transducer, \*secondary air pressure transducer, \*turbocator, \*electromechanical voltage monitor, \*electronic voltage monitor, \*instrument panel voltage regulator; **buzzer(s):** \*general use alarm buzzer, \*differential lockout buzzer, \*low air pressure indicator buzzer, \*turn signal buzzer, \*propane tank warning buzzer; **relay(s):** \*door chime relay, \*fuel level gauge relay, \*electric driven vehicles attachments interrupt relay, \*coolant level sensor relay, \*differential lockout relay; **module(s):** \*frequency to voltage block interface module, \*instrument panel interface module, \*pressure/vacuum block interface module, \*vacuum block interface module, \*analog/digital converter module, \*engine oil level module, \*low fuel module, \*analog/digital converter pressure module, \*analog/digital converter vacuum module; **sender(s):** \*brake master cylinder fluid level sender, \*fuel pressure sender, \*high water temperature sender, \*low air pressure indicator sender, \*multi-function gauge sender, \*rear axle temperature sender, \*air pressure gauge sending unit, \*axle temperature sending unit, \*engine oil pressure sending unit, \*engine temperature sending unit, \*engine water temperature sending unit, \*exhaust temperature sending unit, \*fuel gauge sending unit, \*fuel level sending unit, \*oil temperature sending unit, \*hydrostatic fan motor temperature sending unit; **switch(es):** \*air restriction switch, \*propane cylinder cradle latch indicator switch, \*high water temperature warning override switch, \*differential lockout indicator lamp switch, \*parking brake indicator lamp switch, \*engine coolant temperature indicator switch, \*engine metal temperature indicator switch, \*manifold vacuum gauge switch, \*oil pressure switch, \*power steering pressure differential switch, \*fuel tank selector switch, \*air pressure gauge signal switch, \*low hydraulic pressure signal switch, \*low fuel warning indicator switch, **sensor(s):** \*ammeter sensor, \*coolant level sensor, \*fuel flow sensor, \*temperature/compass gauge module sensor, \*oil level sensor, \*oil viscosity sensor, \*outside air temperature sensor, \*power steering pressure sensor, \*radiator pressure sensor, \*hydraulic temperature sensor, \*transmission oil pressure sensor, \*transmission temperature sensor, \*water in fuel sensor; **gauge(s):** \*air cleaner restriction gauge, \*dash air pressure gauge, \*air starter gauge, \*air tank gauge, \*auxiliary transmission temperature gauge, \*exhaust back pressure gauge, \*brake saver air gauge, \*brake saver oil temperature gauge, \*CNG alarm detector gauge, \*coolant level gauge, \*engine load gauge, \*engine temperature (dash unit) gauge, \*fuel pressure gauge, \*fuel restriction gauge, \*hydraulic pressure gauge, \*electric driven vehicles attachments interrupt gauge, \*leveling gauge, \*liftable axle gauge, \*load gauge air gauge, \*manifold pressure gauge, \*manifold vacuum gauge, \*multi-function gauge, \*oil pressure gauge, \*oil temperature gauge, \*center drive axle oil temperature gauge, \*front drive axle oil temperature gauge, \*rear drive axle oil temperature gauge, \*steer drive axle oil temperature gauge, \*outside air temperature gauge, \*power steering gauge, \*universal pressure gauge, \*pusher suspension gauge, \*rear brake application gauge, \*trailer service air pressure gauge, \*tag suspension pressure gauge, \*axle oil temperature gauge, \*dash unit temperature gauge, \*trailer brake application gauge, \*transmission fluid level gauge, \*transmission oil pressure gauge, \*transmission temperature gauge, \*volt and pressure gauge, \*voltage gauge, \*water pressure gauge, \*water temperature gauge, \*oil pressure gauge & sending unit (combined), \*water temperature gauge & sending unit (combined), \*fuel gauge assembly, \*fuel tank unit gauge assembly; **wiring:** \*outside air gauge sensor cable, \*low oil sensor cable assembly, \*engine heater indicator light cord, \*message center front overlay, \*coolant fluid level sensor harness, \*outside air temperature sensor jumper harness, \*water in fuel sensor harness, \*ammeter wiring, \*fuel pressure gauge wiring, \*fuel tachometer wiring, \*high water temperature switch wiring, \*low coolant sensor wiring, \*oil temperature sender wiring, \*differential lockout switch wiring, \*temperature gauge wiring, \*voltmeter wiring, \*warning lamp wiring, \*water temperature sender wiring, \*compass wiring harness, \*coolant sensor wiring harness, \*dash warning lamps wiring harness, \*engine cooling system wiring harness, \*gauges wiring harness, \*ignition buzzer/chime wiring harness, \*warning inter-axle wiring harness, \*low air pressure wiring harness, and \*seat belt indicator wiring harness. **PROGRESSIVE ONLY CLASS:** gauge face, bezel(s), bulb(s), indicator/indicator lamp(s), lens, gauge visor(s), decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

- 2. SPEEDOMETER (003-002):** **SYSTEM COVERAGE CLASS:** N/A. **ASSEMBLY COVERAGE CLASS:** speedometer drive gear, ratio drive adapter gear, speedometer driven gear and shaft, cable driven speedometer head, speedometer flexible shaft (cable), \*odometer, \*complete instrument cluster; **housing/cover(s):** instrument cluster back cover, speedometer flexible shaft (cable) housing, cable housing end; **gasket(s):** \*instrument cluster foam gasket; **seal(s):** \*speedometer drive sleeve o-ring, \*manual speedometer adapter shaft seal, and \*speedometer shaft seal. **PART COVERAGE CLASS:** \*electric speedometer head, \*pulse divider module, \*electric speedometer sender, \*electronic speedometer sensor; **wiring:** \*distance sensor wiring harness, \*speedometer wiring harness, and \*trip odometer wiring harness. **PROGRESSIVE ONLY CLASS:** dial face, reset button, lens, sleeve, decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s),

connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

**3. METER COMPONENTS (003-003):** no coverage.

**4. SHUTDOWN DEVICES (003-004):** no coverage.

**5. ANTI-THEFT (003-005):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: N/A. PART COVERAGE CLASS: \*ignition immobilizer antenna, \*anti-theft system horn, \*keyless entry keypad, \*keyless entry receiver, \*anti-theft system relay, \*cab alarm security system, \*anti-theft alarm control switch, \*security system transmitter; **module(s):** \*ignition immobilizer module, \*keyless entry control module, \*electronic component controls ETACS module; **sensor(s):** \*keyless entry sensor, \*anti-theft system motion sensor; and **wiring:** \*security system wiring harness. PROGRESSIVE ONLY CLASS: \*keyless entry remote (and battery), decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

**6. MONITORING DEVICES (003-006):** no coverage.

**D. AERODYNAMIC DEVICES (004):** no coverage.

## CHASSIS GROUP

**E. FRONT STEERING AXLES (011):** no coverage.

**F. REAR NON-DRIVEN AXLES (012):** no coverage.

**G. BRAKES (013)**

**1. FRONT BRAKES & DRUMS (013-001):** no coverage.

**2. REAR BRAKES & DRUMS (013-002):** no coverage.

**3. PARKING BRAKES (013-003):** no coverage.

**4. SPRING PARKING BRAKE (SEPARATE OR COMBINATION W/SERVICE BRAKE) (013-004):** no coverage.

**5. SERVICE BRAKE PEDAL ASSEMBLY (013-005):** no coverage.

**6. BRAKE MASTER CYLINDER (013-006):** no coverage.

**7. HYDRAULIC BRAKE LINES & FITTINGS (013-007):** no coverage.

**8. VACUUM TYPE POWER BRAKES (013-008):** no coverage.

**9. AIR COMPRESSOR (013-009):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: **compressor:** air brakes compressor, cylinder head, crankshaft, front and rear crankshaft bearings, unloader piston, piston ring, piston pin, connecting rod, unloader valve, air compressor valve, air compressor drive gear, drive support bearing, compressor pulley, idler pulley, idler pulley bearing, air compressor vent valve, compressor inlet valve, \*air compressor vacuum/hydraulic pressure converter, air compressor hostler valve, air compressor exhaust manifold, air compressor air pre-cooler, \*air compressor 3-way regulating, compressor pop-off safety valve, compressor delivery valve, bypass type unloader control valve, \*auxiliary air compressor clutch, \*auxiliary auto pump compressor, \*isolation valve; **air governor:** governor breather valve, **alcohol evaporator:** alcohol evaporator reservoir, reservoir & cap assembly, \*alcohol injector, alcohol evaporator check valve; **housing/cover(s):** crankcase housing, air cleaner cover, compressor rear bearing cover crankshaft cover, discharge cover, alcohol evaporator cover; **gasket(s):** \*air inlet adapter gasket, \*oil bath air cleaner gasket, \*alcohol evaporator gasket, \*rear crankshaft bearing cover gasket, \*cylinder block gasket, \*compressor cylinder head gasket, \*discharge lines gasket, \*regulator or governor air mounting gasket, \*pre-cooler mounting gasket, \*air compressor &/or \*crankcase mounting gasket; **seal(s):** \*air compressor seal, \*air compressor crankshaft oil seal, \*unloader filter seal/gasket, \*air compressor o-ring, \*air system, \*air line, hose, tube, plumbing o-ring, and \*air compressor sealing plug. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: air cleaner element, air cleaner filter, air cleaner valve kit, strainer, resonator, belt(s), decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

**10. AIR TYPE POWER BRAKES (013-010):** no coverage.

**11. ABS, ANTI-LOCK SYSTEM (013-011):** no coverage.

**12. ELECTRIC BRAKES (013-012):** no coverage.

**13. AIR DISC BRAKES (013-013):** no coverage.

**14. TAG/PUSHER AXLE BRAKES (013-014):** no coverage.

**15. AIR BRAKE MONITORING SYSTEM (013-015):** no coverage.

**16. HYDRAULIC MOTOR BRAKE SYSTEM (013-016):** no coverage.

**17. POSITION NOT SPECIFIED BRAKE PARTS (013-017):** no coverage.

## H. FRAME COMPONENTS (014): no coverage.

### I. STEERING (015)

1. **STEERING WHEEL (015-001):** no coverage.
2. **STEERING SHAFT SUPPORT (015-002):** no coverage.
3. **STEERING GEAR (015-003):** SYSTEM COVERAGE CLASS: lower steering column bearing, upper steering column bearing, steering column bearing assembly (cup and cone), steering column worm gear bearing assembly (cup and cone), upper and lower worm gear thrust bearing, steering gear bearing cap, steering gear bearing cap plunger, worm & shaft assembly, steering auxiliary gear, steering pinion gear, steering gear rack piston, steering gear circulating ball, electric steering gear motor, and circulating ball guide. ASSEMBLY COVERAGE CLASS: steering gear cylinder head plunger, pitman shaft bushing or bearing, lower steering shaft bushing, steering shaft universal joint, lower steering shaft yoke, steering gear rack rod, steering gear relief valve, steering gear relief valve spring, steering gear poppet valve, steering gear rack poppet spring; **shaft(s):** steering gear input shaft, pitman (sector) shaft, steering gear lower steering column shaft, intermediate steering column shaft, upper steering column shaft, twin steering lower steering shaft; **housing/cover(s):** steering column (mast jacket) housing, steering gear housing, steering gear valve housing, steering gear ball screw cover, steering gear housing end cover, housing side cover, steering gear sector shaft cover, steering gear trunnion cover, worm gear seal dust cover; **gasket(s):** \*lower steering shaft boot gasket, \*steering gear housing end cover gasket, \*housing side cover gasket; **seal(s):** \*steering gear o-ring, \*steering gear housing bypass plate, \*adjuster seal, column toeboard seal, \*steering gear housing cross shaft seal, \*steering gear output shaft seal, \*pitman shaft seal, \*upper worm shaft seal, \*steering gear input shaft seal kit, \*steering gear sector shaft seal kit, and \*lower steering column bearing dust seal. PART COVERAGE CLASS: steering column cross shaft, and \*sensor to motor wiring harness. PROGRESSIVE ONLY CLASS: steering column shift bowl, decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
4. **STEERING LINKAGE (015-004):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: pitman arm, steering arm, steering idler arm, steering relay arm, drag link ball joint, steering bell crank bearing, bell crank bearing, damper cylinder, relay arm key, relay rod key, tie rod end sleeve; **seal(s):** \*steering linkage o-ring, \*bell crank seal, \*drag link seal, \*dust seal, \*tie rod end dust cover seal, \*idler arm bushing seal, and \*inner relay rod seal. PART COVERAGE CLASS: steering relay (ackermann arm, steering lever) rod, inner tie rod, right tie rod, and left tie rod. PROGRESSIVE ONLY CLASS: tie rod bushing, tie rod end sleeve, bumper, dust shield, decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
5. **POWER STEERING (015-005):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: power steering pump, steering/fuel tandem pump, steering oil pump body, oil pump rotor cam, oil pump rotor vane, power steering oil pump rotor, power steering oil pump shaft, oil pump tank, oil pump tank element, oil pump thrust plate, power steering pump reservoir, steering gear oil pump cover, power steering pump flow control valve, power steering pump pressure relief valve, steering pump bushing, power steering assist cylinder, steering pump adapter gear, pump pulley to shaft key, oil pump pulley; **gasket(s):** \*reservoir cap gasket, \*filter gasket, \*oil pump tank gasket, \*pressure line gasket, \*oil pump mounting gasket, \*steering pump mounting gasket; **seal(s):** \*oil pump end plate o-ring, \*power steering hose o-ring, \*oil pump plug o-ring, \*oil pump pressure plate o-ring, \*steering system, air line, hose, tube, plumbing o-ring, \*steering system, steering fluid line, hose, tube, plumbing o-ring, \*hole plug, \*flow control valve seal, \*oil pump body seal, \*oil pump shaft seal, \*pump outlet fitting seal, \*hydroboost seal kit, and \*steering pump shaft seal. PART COVERAGE CLASS: \*power steering control module, \*solenoid control relay, \*control valve solenoid, \*power steering pressure switch, \*fluid level sensor, \*hydraulic steering temperature sensor, and \*power steering wiring harness. PROGRESSIVE ONLY CLASS: belt(s), cap(s), dipstick, filters, decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
6. **INTEGRAL GEAR TYPE CONTROL VALVE (TORQUE GENERATOR) (015-006):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: rotary valve body, valve body (teflon) ring, spool valve & plug, valve spool centering spring, valve spool thrust bearing, gear set, bearing shaft, stub shaft, stub shaft torsion bar, stub shaft bearing, rebound shock, control valve (torque generator) bushing, control valve (torque generator) end plate, integral gear type control spring valve, and integral gear type control valve plate; **seal(s):** \*stub shaft seal, and \*valve to housing seal. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

- 7. TIE ROD TYPE CONTROL VALVE (015-007):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: hydraulic control valve, power cylinder, head and socket cylinder, steering ram cylinder piston ring, steering control valve piston, power piston rod, piston rod scraper, socket and rod, adapter ball seat spring, ball stud spring, reaction valve spring, valve adjusting spring, valve shaft, reaction valve spool, spool valve, steering ram piston gland, adapter ball seat, ball stud seat, ball stud spring seat, adapter sleeve bearing; **housing/cover(s):** valve dust cover, adapter housing, steering cylinder control valve piston housing, valve housing; **gasket(s):** \*control valve gasket; **seal(s):** \*annulus seal, \*piston rod seal, \*o-ring reaction spool seal, \*valve spool seal, and \*control valve seal. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: cylinder mounting cushion, hose protection plate, studs, plugs, dust shield, decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
- 8. ELECTRIC POWER STEERING PUMP MOTOR (015-008):** no coverage.
- 9. DUAL STEERING (015-009):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: 2 hole flange bearing, left bevel box, right bevel box, bevel gear, bearing cup and cone, dual steering cross shaft driveline, universal joint assembly, dual steering valve, open/closed end cap; **shaft(s):** cross shaft, pinion shaft, left/right/center steering shaft; **housing/cover(s):** left bevel box housing, right bevel box housing, pinion gear housing, steering shaft cover; **gasket(s):** \*dual steering bevel gear end cap gasket. PART COVERAGE CLASS: \*dual steering control switch, and \*dual Steering wiring. PROGRESSIVE ONLY CLASS: decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
- 10. ALL STEER STEERING (015-010):** no coverage.
- 11. TRANSFERABLE (VARIO PILOT) STEERING ASSEMBLY (015-011):** no coverage.
- 12. ELECTRONIC STABILITY CONTROL (ESC) (015-012):** no coverage.
- 13. RACK & PINION TYPE STEERING GEAR (015-013):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: rack & pinion rack gear, rack & pinion steering pinion shaft, rack & pinion bearing kit, rack & pinion housing; **seal(s):** \*rack & pinion steering gear input shaft seal, and \*rack & pinion housing seal. PART COVERAGE CLASS: right and left rack and pinion steering gear tie rods. PROGRESSIVE ONLY CLASS: linkage bellows, cap, drain plug, decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
- 14. HYDRAULIC STEERING SYSTEM (CONSTRUCTION EQUIPMENT) (015-014):** no coverage.
- 15. ELECTRIC LANE ASSIST STEERING (015-015):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: \*electric lane assist steering column, \*electric lane assist steering shaft, \*electric lane assist steering gear motor, and \*electric lane assist steering gear. PART COVERAGE CLASS: \*electric lane assist sensor to motor wiring harness. PROGRESSIVE ONLY CLASS: decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

## J. SUSPENSION (016)

- 1. INDEPENDENT FRONT SUSPENSION (016-001):** no coverage.
- 2. FRONT SPRINGS (016-002):** no coverage.
- 3. FRONT SHOCK ABSORBERS (016-003):** no coverage.
- 4. FRONT STABILIZER (016-004):** no coverage.
- 5. REAR (NON-AIR) SUSPENSION (016-005):** no coverage.
- 6. REAR SHOCK ABSORBER (016-006):** no coverage.
- 7. STABILIZER - REAR (016-007):** no coverage.
- 8. AIR RIDE SUSPENSION (016-008):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: air suspension front/rear air springs (air bags), air bag piston, suspension air cylinder, air cylinder diaphragm, air cylinder push rod, hydropneumatic piston accumulator, torsion bar, air ride suspension alignment collar, air ride suspension compressor dryer, air ride suspension reservoir assembly, air ride suspension tracking rod, shock absorber, air suspension bellows, alignment bushing, pivot bushing, rear suspension sway bar bushing, air ride suspension torque rod bushing, trailing arm bushing, air ride suspension v-rod bushing, pressure regulator, \*kneel system rectifier, air ride suspension check valve, dump valve, leveling valve, leveling valve rod end, air ride suspension pressure valve, two-way valve, suspension kneel valve, air ride suspension tank valve, air ride suspension load sensing valve, air ride suspension air regulator valve, flipper valve, pilot valve, recovery valve, unloader valve, **housing/cover(s):** air cylinder housing, air cylinder housing lid, and height control valve housing. PART COVERAGE CLASS: rear suspension lower control arm, rear suspension upper control arm, \*leveling valve actuator, \*air ride

suspension remote air control control, \*ECU control module, \*kneel solenoid, \*air ride suspension remote air control solenoid, \*kneel switch, \*kneel sensing switch; **sensor(s)**: \*electrical air suspension leveling sensor; **wiring**: \*air suspension & load leveling wiring harness PROGRESSIVE ONLY CLASS: filter, torque rods, sway bars, arms, beams, beam bushings, bumper, cap, carrier, dampener, pad, strap, air line cover, drain cock, decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

**9. AIR LEAF SUSPENSION (016-009)**: no coverage.

**10. LIFTABLE AIR SUSPENSION (016-014)**: no coverage.

**11. CAB/SLEEPER SUSPENSION (016-015)**: no coverage.

**12. AIR RIDE SUSPENSION SLIDER (016-018)**: no coverage.

**13. RIDE HEIGHT LOCKING DEVICE (016-019)**: no coverage.

**14. STRUT (016-020)**: no coverage.

**15. CONTROL ARM (016-021)**: no coverage.

**16. ACTIVE SUSPENSION (016-022)**: no coverage.

**17. INDEPENDENT REAR SUSPENSION (016-023)**: no coverage.

**K. TIRES, TUBES, LINERS, VALVES (017)**: no coverage.

**L. WHEELS, RIMS, HUBS, & BEARINGS (018)**: no coverage.

**M. AUTOMATIC/MANUAL CHASSIS LUBRICATOR (019)**: no coverage.

## DRIVETRAIN GROUP

**N. REAR DRIVEN AXLE SYSTEM (022)** (see *Essential Plan for additional coverage*)

**1. AIR OR VACUUM AXLE CONTROLS (022-005)**: SYSTEM COVERAGE CLASS: shift fork and shaft. ASSEMBLY COVERAGE CLASS: air shift cylinder, shift cylinder or chamber, vacuum shift cylinder diaphragm, rear axle shift unit piston, shift unit cover bearing, double reduction shifter clutch, air shift cylinder push rod, 2-speed ratio converter, double reduction shifter yoke shaft, double reduction shifter sleeve, shifter double reduction yoke, inner air shift cylinder lever, double reduction shifter lever, double reduction shifter yoke shaft lever, air or vacuum check valve, axle control air control valve, driven rear axle vacuum control valve, selector valve assembly, air shift valve; **housing/cover(s)**: air shift cylinder housing, air shift cylinder diaphragm cover, air shift cylinder housing cover; **gasket(s)**: \*vacuum shift flange gasket, \*air shift cylinder housing cover gasket; **seal(s)**: \*double reduction shifter seal, \*vacuum shift mounting sleeve seal, and \*air shift cylinder shift fork rod seal. PART COVERAGE CLASS: \*differential lock power switch sensor, \*air shift switch, \*driven rear axle remote air control solenoid and \*control. PROGRESSIVE ONLY CLASS: air shift filter, axle fork slide shoe, interlock valve handle, rear axle shift sliding block, plug(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

**2. ELECTRIC SHIFT AXLE CONTROLS (022-006)**: SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: \*rear axle shaft electric motor, drive screw assembly, shift fork actuating lever, shift fork lever shaft; **housing/cover(s)**: shift motor housing, shift motor cover, drive screw bearing cover, driven rear axle shift housing cover; **gasket(s)**: \*driven rear axle bearing cover gasket, \*shift motor cover gasket, and \*shift housing cover gasket. PART COVERAGE CLASS: \*automatic switch, \*gear shift lever switch, \*gear shift lever switch relay assembly, and \*electronic shift axle controls wiring harness. PROGRESSIVE ONLY CLASS: plug(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), line(s)/pipe(s)/hose(s), bracket(s), mounting hardware, adapter/flange/mounting plate(s), support(s), washer(s), nut(s), screw(s)/bolt(s), and washer(s).

**O. CLUTCH SYSTEM (023)**

**1. CLUTCH MECHANICAL CONTROL ASSEMBLY (023-001)**: no coverage.

**2. CLUTCH (023-002)**: no coverage.

**3. DIVORCED TRANSMISSION CLUTCH OUTPUT SHAFT (023-003)**: no coverage.

**4. CLUTCH ELECTRONIC CONTROL ASSEMBLY (023-004)**: no coverage.

**P. DRIVE SHAFTS (024)**

**1. FRONT DRIVING AXLES DRIVE SHAFT (024-001)**: no coverage.

**2. BEHIND MAIN TRANSMISSION DRIVE SHAFT (024-002)**: SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: drive shaft stub bearing, drive shaft universal joint journal bearing, drive shaft bearing assembly, increasing bushing, slinger, pinion

angle, pilot reducer, driveshaft brake caliper, drive shaft bearing cover, universal joint journal, drive shaft flange sleeve, drive shaft splined sleeve, transfer case drive shaft, drive shaft and midship bearing, front drive shaft, drive shaft w/slip & stub yokes i(nter-axle, intermediate, rear), wing bearing drive shaft stub shaft, wing bearing drive shaft yoke shaft, drive shaft splined slip shaft, universal joint (center, front and rear), ball stud tube yoke, center double yoke, drive shaft yoke, wing bearing drive shaft end yoke, behind main transmission drive shaft slip yoke, wing bearing drive shaft slip yoke, wing bearing drive shaft tube weld yoke, tube/weld yoke, universal joint sleeve yoke; **seal(s)**: \*companion flange oil seal, slip joint seal, \*front drive shaft bearing seal, and \*rear drive shaft bearing seal. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: flex disc, boot, decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

3. **DRIVE/PROPELLER SHAFT RETARDER (024-003)**: no coverage.

4. **CHAIN DRIVE (024-004)**: no coverage.

## Q. MANUAL MAIN TRANSMISSION AUXILIARY SECTION SYSTEM (029) (see Essential Plan for additional coverage)

1. **AIR CYLINDERS (029-008)**: SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: range cylinder, splitter cylinder, hole gear cylinder, intermediate cylinder, range yoke bar, splitter yoke bar, hole gear yoke bar, intermediate yoke bar, range yoke, splitter yoke, hole gear yoke, intermediate yoke, range piston, splitter piston, hole gear piston, intermediate piston, main transmission air cylinder relay valve, slave valve, gear set, range cylinder piston bar; **housing/cover(s)**: range cylinder cover, intermediate cylinder cover, splitter cylinder cover, hole gear cylinder cover; **gasket(s)**: \*cylinder cover gasket; **seal(s)**: \*range o-ring, \*splitter o-ring, \*hole gear o-ring, and \*intermediate o-ring. PART COVERAGE CLASS: \*output speed sensor. PROGRESSIVE ONLY CLASS: fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), line(s)/pipe(s)/hose(s), bracket(s), mounting hardware, adapter/flange/mounting plate(s), support(s), washer(s), nut(s), screw(s)/bolt(s), and washer(s).

## ELECTRICAL GROUP

## R. CHARGING SYSTEM (031)

1. **GENERATOR/ALTERNATOR (031-001)**: SYSTEM COVERAGE CLASS: \*generator/alternator field coil, \*armature, \*alternator brushes, brush holder, \*alternator commutator, \*alternator capacitor, \*alternator positive and negative diodes, \*alternator stator, alternator brush spring, \*alternator rectifier, \*alternator rotor, alternator shaft, brush end bearing, alternator drive end bearing, brush end frame, drive end frame, alternator drive gear, and heat sink. ASSEMBLY COVERAGE CLASS: generator or alternator fan/blower, alternator tensioner, generator or alternator pulley, generator/alternator idler pulley, alternator pulley & fan, alternator pulley cap, alternator yoke, slidable housing bushing; **housing/cover(s)**: alternator housing, drive end dust cover, alternator relay cover; **gasket(s)**: \*alternator bracket gasket, \*rear frame gasket, \*alternator mounting gasket; **seal(s)**: \*alternator o-ring, \*alternator seal, \*alternator drive seal, and \*alternator frame seal. PART COVERAGE CLASS: \*alternator terminal, \*generator control relay, \*alternator resistor; **wiring**: \*alternator to ground electrical cable, \*alternator to junction block electrical cable, and \*alternator wiring harness. PROGRESSIVE ONLY CLASS: alternator belt, intake precleaner, guard, decoupler, alternator pulley cap, decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

2. **REGULATOR (031-002)**: SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: \*voltage (full transistor or transistorized) regulator, \*voltage converter, \*regulator diode, \*battery charge equalizer, \*transistors regulator, \*transistor resistor, and \*voltage regulator gasket. PART COVERAGE CLASS: \*regulator field relay, \*voltage converter wiring, and \*equalizer wiring harness. PROGRESSIVE ONLY CLASS: ground cable, voltage regulator fuse, strap, decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

## S. CRANKING SYSTEM (032)

1. **BATTERY & CABLES (032-001)**: no coverage.

2. **STARTER (032-002)**: SYSTEM COVERAGE CLASS: \*starter armature, \*starter armature shunt, \*starter brushes, starter brush holder, starter brush spring, \*starter brush holder jumper, \*starter field coil, field coil pole shoes, \*starter commutator, \*starter magnet, starter compression spring ball, \*starter solenoid, starter armature bearing, starter drive bearing, starter end plate bearing, starter armature bushing, starter insulating bushing, starter drive end bushing, starter end plate bushing, start drive gear, commutator end starter end plate w/bushing, drive end starter end plate w/bushing, starter drive assembly, drive shaft key, starter motor shift lever, starter drive plunger, starter thrust washer replacement kit, starter clutch roller, starter drive lever shaft, starter motor lever return spring. ASSEMBLY COVERAGE CLASS: drive end starter terminal, starter

armature housing end plate, starter inspection plate, starter field windings frame, starter end frame; **housing/cover(s)**: starter armature housing, starter pinion housing, starter solenoid cover, battery disconnect switch cover; **gasket(s)**: \*drive housing gasket, \*spacer to flywheel gasket, \*starter inspection plate gasket; **seal(s)**: \*field frame o-ring, and \*starter drive end seal. **PART COVERAGE CLASS**: \*battery disconnect control module, \*starter relay, \*battery disconnect switch, \*rollover switch, \*starter solenoid switch; **wiring**: \*battery switch wiring, \*starter motor wiring, \*battery disconnect wiring harness, \*shut-off switch battery wiring harness, \*over crank protection circuit wiring harness, and \*battery solenoid wiring harness. **PROGRESSIVE ONLY CLASS**: decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

**3. PRE-HEATER (032-003)**: no coverage.

**4. AIR STARTER (032-004)**: **SYSTEM COVERAGE CLASS**: N/A. **ASSEMBLY COVERAGE CLASS**: air starter motor, air starter shaft, air starter vane (blade), air starter bearing, shaft drive bearing, rotor & plate bearing, gear end shaft drive bearing, housing drive end bearing, actuator piston ring, air starter motor reservoir valve, air supply valve stop bushing, air tank (receiver), air fill valve, air supply drain valve, air starter exhaust valve, starter relay valve, remote control relay valve, manual control valve, \*solenoid control valve, control valve plunger return spring, control valve plunger (armature), air supply check valve, air supply check valve diaphragm, air supply check valve seat, air supply check valve spring; **housing/cover(s)**: air starter housing cover; **gasket(s)**: \*air starter gasket; **seal(s)**: \*air starter seal, \*gladhand seal, \*gladhand valve, \*air starter o-ring. **PART COVERAGE CLASS**: N/A. **PROGRESSIVE ONLY CLASS**: air filter, muffler, gauge box, decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

**5. ON BOARD BATTERY CHARGER (032-005)**: no coverage.

**6. EMERGENCY START (032-006)**: no coverage.

**7. HYDRAULIC STARTER (032-007)**: **SYSTEM COVERAGE CLASS**: N/A. **ASSEMBLY COVERAGE CLASS**: hydraulic starter assembly, hydraulic starter head assembly, and \*hydraulic starter control. **PART COVERAGE CLASS**: N/A. **PROGRESSIVE ONLY CLASS**: filters, decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

## T. IGNITION SYSTEM (033)

**1. IGNITION SWITCH (033-001)**: no coverage.

**2. ENGINE DISTRIBUTOR ASSEMBLY (033-002)**: **SYSTEM COVERAGE CLASS**: distributor cam, distributor cap, distributor point, distributor rotor, distributor shaft, distributor weight, distributor weight spring, \*distributor pick-up coil, distributor wick, distributor driven gear, distributor driven gear pin, distributor vacuum retarder, distributor vacuum advance, distributor vacuum advance delay valve, \*distributor ignition condenser, \*distributor pole piece assembly, \*electronic ignition capacitor, \*electronic ignition stator, breaker plate, and \*reluctor. **ASSEMBLY COVERAGE CLASS**: distributor housing; **gasket(s)**: \*distributor body to cap gasket, and \*distributor to cylinder block gasket. **PART COVERAGE CLASS**: \*electronic ignition system control module, \*ignition resistor, \*distributor switch, \*electronic ignition pick-up; **wiring**: \*distributor ground wire, \*distributor wiring harness, and \*primary lead conductor. **PROGRESSIVE ONLY CLASS**: software, insulator(s) decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

**3. COIL & SPARK PLUGS (033-003)**: **SYSTEM COVERAGE CLASS**: \*ignition coil, ignition coil secondary wire boot, ignition coil cap & terminal. **ASSEMBLY COVERAGE CLASS**: ignition coil cover, \*spark plug tube seal, and \*spark plug gasket. **PART COVERAGE CLASS**: \*primary circuit resistance unit, \*on spark plug ignition coil; **wiring**: \*spark plug wire(s), \*primary (spark plugs & coil) wiring assembly, \*secondary (spark plugs & coil) wiring assembly, and \*ground electrical cable. **PROGRESSIVE ONLY CLASS**: spark plug(s), resistor cap, spark plug wire boot, guard/shield, decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

**U. LIGHTING SYSTEM (034)**: no coverage.

## V. SUPPLEMENTAL INFORMATION DEVICES (036)

**1. COLLISION AVOIDANCE SYSTEM (036-001)**: **SYSTEM COVERAGE CLASS**: N/A. **ASSEMBLY COVERAGE CLASS**: \*collision avoidance system CPU, \*collision avoidance system camera, \*collision avoidance system driver display unit, and \*collision avoidance



system side sensor display unit. PART COVERAGE CLASS: \*collision avoidance system antenna assembly, \*collision avoidance system relay, \*parking aid switch, \*camera box, \*collision avoidance sensor cover; **sensor(s)**: \*collision avoidance system front and rear sensor, \*collision avoidance system left side and right side sensor, \*collision avoidance system pedal position sensor, \*collision avoidance system steering wheel position sensor; **wiring**: \*collision avoidance system driver display wiring harness, \*collision avoidance system main wiring harness, \*collision avoidance system sensor wiring harness, \*collision avoidance system steering wheel sensor wiring harness, \*obstacle detection system antenna cable, and \*collision avoidance system camera electrical cable. PROGRESSIVE ONLY CLASS: display knob, steering wheel sensor pickup magnet, SIM card, decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

2. **LANE DEPARTURE WARNING SYSTEM (036-002)**: no coverage.
3. **VISUAL ASSIST BACK-UP CAMERA (036-003)**: no coverage.
4. **TRANSPONDER (036-004)**: no coverage.
5. **DATA COMMUNICATION POWER LINE CARRIER (PLC) (036-005)**: no coverage.
6. **CARGO ASSET TRACKING (036-006)**: no coverage.
7. **ON BOARD COMPUTER (INSIDE CAB) (036-007)**: no coverage.
8. **SURVEILLANCE SYSTEM (036-008)**: no coverage.
9. **VEHICLE PERFORMANCE MONITOR (036-009)**: no coverage.
10. **ELECTRONIC ON BOARD RECORDER (EOBR) ELECTRONIC LOGGING DEVICE (ELD) (036-010)**: no coverage.
11. **TRAILER SENSOR SYSTEM (036-011)**: no coverage.
12. **BACKUP WARNING SYSTEM (036-012)**: no coverage.
13. **ADAPTIVE CRUISE CONTROL (036-013)**: no coverage.
14. **DRIVER RISK MANAGEMENT CAMERA SYSTEM (036-014)**: no coverage.
15. **EXTERIOR RECORDING SYSTEM (036-015)**: no coverage.
16. **CAMERA MONITORING SYSTEM (CMS) (036-016)**: no coverage.

**W. ELECTRICAL MODULES/RELAYS (037)**: no coverage.

## ENGINE/MOTOR SYSTEMS GROUP

### X. AIR INTAKE SYSTEM (041)

1. **AIR CLEANER (041-001)**: no coverage.
2. **INTAKE MANIFOLD (041-002)**: SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: intake manifold, intake manifold cover, air intake crossover, intake manifold inlet valve; **gasket(s)**: \*air intake crossover to after cooler gasket, \*exhaust manifold to intake manifold gasket, \*intake manifold gasket; **seal(s)**: \*intake manifold end seal, \*intake manifold inlet elbow seal, \*intake manifold inlet valve seal, and \*intake manifold seal. PART COVERAGE CLASS: \*air intake actuator, \*actuator motor, \*swirl flap solenoid, \*intake assembly shutter, **sensor(s)**: \*intake manifold sensor, \*swirl flap position sensor, \*intake manifold temperature sensor, \*intake manifold temperature/pressure sensor, and \*Intake manifold temperature sensor wiring harness. PROGRESSIVE ONLY CLASS: decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
3. **SUPERCHARGER BLOWER (041-003)**: no coverage.
4. **CHARGE AIR COOLER (041-004)**: SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: charge air cooler, pre-air cooler, after-cooler, intercooler head, charge air cooler baffle, charge air cooler (air-to-air) fan assembly, charge air cooler housing, \*charge air cooler thermostat, charge air cooler tank, charge air cooler coolant expansion tank, tip turbine air check valve, buffered air (BVU) valve, \*charge air cooler intake throttle valve; **gasket(s)**: \*charge air cooler bypass line gasket, \*charge air cooler gasket, \*hose adapter charge air cooler gasket; **seal(s)**: \*air casting pipe, \*charge air cooler air casting pipe o-ring, \*charge air cooler o-ring, and \*charge air cooler thermostat seal.  
PART COVERAGE CLASS: \*charge air cooler air pressure & temperature sensor, and \*charge air cooler air pressure sensor.  
PROGRESSIVE ONLY CLASS: insulator(s), sleeve(s), duct(s), decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
5. **ETHER INJECTOR ASSEMBLY (041-005)**: no coverage.
6. **THROTTLE BODY (041-006)**: no coverage.

## Y. COOLING SYSTEM (042)

1. **SHUTTERS (042-001):** no coverage.
2. **RADIATOR (042-002):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: radiator, heat exchanger, lower tank, left radiator tank, right radiator tank, upper tank, surge tank, surge tank manifold, radiator filler neck, coolant recovery bottle, auxiliary cooling module, \*auxiliary cooling module fan, radiator air baffle, radiator water baffle, radiator check valve, radiator pressure relief valve, seat type hose to male pipe valve, transmission oil cooler, transmission oil cooler pump; **housing/cover(s):** radiator support access cover, bottom radiator cover, left radiator cover, right radiator cover, top radiator cover; **gasket(s):** \*engine coolant overflow reservoir cap gasket, \*coolant pipe gasket, \*oil cooler header gasket, \*engine coolant surge tank hose gasket, \*oil cooler inlet gasket, \*overflow pipe gasket, \*radiator outlet/inlet block off plate gasket, \*engine control pressure relief valve gasket, \*radiator cap gasket, \*radiator shroud gasket, \*lower radiator tank gasket, \*upper radiator tank gasket, \*general radiator gasket, \*engine coolant remote filler neck gasket, \*surge tank gasket, \*engine coolant surge tank gasket, \*radiator drain plug gasket/seal, \*coolant hose connector gasket; **seal(s):** \*cooling system, water line, hose, tube, plumbing o-ring, \*fan shroud seal, and \*recirculation shield seal. PART COVERAGE CLASS: \*auxiliary cooling module temperature sensor, and \*radiator support air deflector actuator. PROGRESSIVE ONLY CLASS: filler cap, shield(s), guard(s), shroud(s), coolant level sight glass, screen, strap(s), insulator(s), drip pan, duct(s), dipstick, surge tank breather, decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
3. **ENGINE COOLING FAN (042-003):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: hydraulic (oil to air) oil cooler fan, fan clutch (electric, electromagnetic, pneumatic, viscous fan, and on/off type) fan clutch piston & bearing assembly, fan clutch drive bushing, radiator fan angle drive, radiator fan angle drive shaft key, electric fan motor, hydraulic fan drive motor, fan drive magnet, fan motor brush set, hydraulic fan drive control manifold, hydraulic fan cooler, fan drive gear set, mechanical drive fan gearbox, hydraulic fan drive pump, radiator cooling fan blade, air chamber, fan drive spring carrier, rotary air union; **shaft(s):** radiator fan angle drive drive shaft, fan clutch drive shaft, fan driven idler shaft; **bearing(s):** fan clutch drive bearing, fan hub bearing, fan idler pulley bearing, drive belt tensioner pulley bearing, radiator fan drive shaft bearing, cooling fan bearing and/or hub assembly, fan hub thrust bearing, shaft drive bearing cup and cone; **pulley(s):** fan driven pulley, fan driven idler pulley, drive belt idler pulley bushing, driven fan pulley hub, drive belt tensioner pulley, drive belt tensioner pulley bushing, radiator fan clutch and pulley, belt tensioner; **housing/cover(s):** fan clutch drive housing, fan drive housing cover, idler pulley cover, radiator fan motor cover; **gasket(s):** \*radiator fan angle drive gasket, \*fan drive housing gasket, \*fan spacer gasket; **seal(s):** \*radiator fan angle drive seal, \*fan clutch seal, \*fan hub seal, \*fan shroud seal, \*fan idler pulley seal, \*fan drive motor seal, \*fan clutch drive o-ring, and \*radiator fan angle drive shaft o-ring. PART COVERAGE CLASS: thermo-pneumatic control valve, hydraulic fan control pressure valve, \*fan clutch solenoid valve, hydraulic fan drive flow control valve, \*radiator fan remote air control control, \*radiator fan control module, \*fan clutch control module, \*radiator electric fan relay, \*radiator fan relay, \*radiator fan resistor, \*radiator fan remote air control solenoid; **sensor(s):** \*fan speed sensor, \*radiator fan temperature sensor, \*fan clutch thermostat sensor; **switch(es):** \*engine fan clutch override switch, \*fan hub pressure cut-off switch, \*electric fan switch, \*thermal switch; **wiring:** \*in-line device harness, \*fan clutch control module wiring, and \*electric fan wiring. PROGRESSIVE ONLY CLASS: fan belt, filter(s), shroud, decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
4. **WATER PUMP (042-004):** SYSTEM COVERAGE CLASS: water pump, water pump body, water pump impeller, water pump shaft, water pump shaft bearing, water pump shaft sleeve, water pump idler, water pump idler shaft, water pump idler bearing, accessory drive, accessory drive shaft, water pump drive gear, water pump drive thrust washer, water pump drive pulley, water pump idler pulley, water pump pulley hub, water pump pulley cap, and water pump pulley lock. ASSEMBLY COVERAGE CLASS: **housing/cover(s):** engine coolant outlet housing, water pump housing, water pump inlet housing; **gasket(s):** \*coolant bypass hose gasket, \*engine coolant outlet housing gasket, \*water pump outlet pipe gasket, \*water pump outlet gasket, \*water inlet gasket, \*water pump gasket, \*water pump cover gasket; **seal(s):** \*water pump housing o-ring, \*water pump o-ring, \*water pump idler seal, \*water pump seal, and \*water pump shaft seal. PART COVERAGE CLASS: \*coolant pump speed sensor. PROGRESSIVE ONLY CLASS: breather filter, water pump belt, decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
5. **WATER MANIFOLD (042-005):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: water manifold, \*water manifold gasket, and \*water manifold o-ring. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s),

shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

6. **ENGINE COOLING SYSTEM THERMOSTAT (042-006):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: water or air thermostat, thermostat housing pressure cap, thermostat ring, thermostat spring, thermostat actuating rod, water thermostat housing; **gasket(s):** \*cooling system bleeder screw gasket, \*engine thermostat water outlet gasket, \*water thermostat housing gasket; **seal(s):** \*thermostat bypass pipe o-ring, \*thermostat bypass pipe o-ring, \*thermostat housing o-ring, \*oil cooler to thermostat housing mounting tube o-ring, and \*thermostat housing seal. PART COVERAGE CLASS: water pressure one way check valve. PROGRESSIVE ONLY CLASS: decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
7. **COOLANT FILTER (042-007):** no coverage.
8. **EXTERNAL ELECTRIC POWER SUPPLY COOLANT PRE-HEATER (ON POWER PLANT) (042-008):** no coverage.
9. **EXTERNAL ELECTRIC POWER SUPPLY COOLANT PRE-HEATER (IN BLOCK) (042-009):** no coverage.
10. **LIQUID SELF-CONTAINED COOLANT PRE-HEATER (ON VEHICLE) (042-010):** no coverage.
11. **WATER HEATER (042-011):** no coverage.
12. **COOLANT DIVERTER (042-012):** no coverage.
13. **MECHANICAL LIQUID HEAT GENERATOR COOLANT PRE-HEATER (042-013):** no coverage.

## Z. POWER PLANT SYSTEM (045) (see Essential & Pro Plans for additional coverage)

1. **OIL FILTER ASSEMBLY (045-011):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: oil filter drain valve, bypass oil filter drain valve, oil filter safety valve, bypass oil filter safety valve, bypass oil filter inlet and outlet check valves, bypass oil filter centrifuge bowl, bypass oil filter turbine body, oil filter head, oil module, oil filter base plate; **housing/cover(s):** bypass oil filter housing, engine oil filter housing, bypass oil filter cover, engine oil filter cover, engine oil filter housing cover, engine oil return cover; **gasket(s):** \*engine oil filter adapter gasket, \*oil filter and alternator adapter gasket, \*engine oil return cover gasket, \*engine oil filter gasket, \*full flow oil filter housing gasket, \*oil filter plug gasket, \*oil module gasket, \*bypass oil filter housing gasket; **seal(s):** \*bypass oil filter bowl seal, \*bypass oil filter cover seal, and \*full flow oil filter housing o-ring. PART COVERAGE CLASS: bypass oil filter control mechanism. PROGRESSIVE ONLY CLASS: oil filter element(s), oil fill strainer, oil module connecting pipe oil ring, oil filter can (housing), turbine baffle screen, bypass oil filter air valve cartridge, oil filter spring(s), soot centrifuge, decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
2. **VENTILATING ASSEMBLIES (045-014):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: breather body, crankcase breather bottle, breather spring, crankcase (cdr) depression regulator valve, crankcase ventilation valve diaphragm, positive crankcase ventilation (PCV) check valve assembly, breather housing; **gasket(s):** \*crankcase ventilation breather assembly gasket, \*crankcase oil separator filter gasket; **seal(s):** \*crankcase ventilation check valve assembly o-ring, \*filter/oil separator o-ring, \*crankcase vent valve seal, and \*rectangular ring seal. PART COVERAGE CLASS: \*crankcase breather heater and ported vacuum switch. PROGRESSIVE ONLY CLASS: crankcase ventilation filter, crankcase ventilation filter/oil separator, PCV Flame guard, breather pad, decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
3. **FLYWHEEL TYPE VEHICLE RETARDER (045-015):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: N/A. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: \*flywheel type retarder, retarder valve, \*flywheel type retarder switch, \*retarder seal, decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
4. **OIL (POWER PLANT) PRE-HEATER (045-016):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: \*power plant oil pan heater element. PART COVERAGE CLASS: \*oil pan heater wiring. PROGRESSIVE ONLY CLASS: decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
5. **OIL AUXILIARY RESERVOIR (045-017):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: oil tank, auxiliary reservoir tank valve, \*auto oil fill probe, and \*oil regulator cap gasket. PART COVERAGE CLASS: \*oil level regulator wiring, \*auto fill timer, \*auto oil fill control module, \*oil level regulator, and \*regulator band. PROGRESSIVE ONLY CLASS: gauge sight & tube, decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), connector(s), retainer(s),

pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

- 6. VALVE CYCLE MODIFICATION TYPE ENGINE RETARDER (045-018):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: constant throttle valve (CVT) piston, engine brake piston, engine brake piston bridge, constant throttle valve (CVT) spring and guide, constant throttle valve (CVT) collets, inner and outer control valve springs, engine retarder master and slave piston springs, engine brake brake PSI relief valve, constant throttle valve (CVT) valve, engine retarder control valve, engine brake pressure reducing valve; ***gasket(s):*** \*engine brake gasket; ***seal(s):*** \*engine retarder solenoid bottom seal, \*engine retarder solenoid center seal, \*constant throttle valve (CVT) piston seal, \*constant throttle valve (CVT) stem seal, \*engine retarder solenoid upper seal; ***housing/cover(s):*** constant throttle valve (CVT) cover, and engine brake housing. PART COVERAGE CLASS: \*engine brake control module, \*engine brake enable relay, \*engine brake brake pressure control sensor, \*constant throttle valve (CVT) solenoid, \*engine retarder solenoid valve (three-way), \*engine retarder dash (on-off) switch, \*engine retarder clutch switch, \*engine retarder foot control switch, and \*engine retarder wiring harness. PROGRESSIVE ONLY CLASS: temperature probe, lash adjuster, engine brake regulator pin, engine brake sealing ring, decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

- AA. MULTI SYSTEM FILTER KIT (047):** no coverage.

### ACCESSORIES GROUP

**BB. GENERAL ACCESSORIES (051)**

1. **TACHOMETER (051-001):** no coverage.
2. **HUBODOMETER (051-002):** no coverage.
3. **HOURLMETER (051-003):** no coverage.
4. **TACHOGRAPH (051-004):** no coverage.
5. **FUEL & MILEAGE RECORDER (051-005):** no coverage.
6. **ACCESSORY SAFETY DEVICES (051-006):** no coverage.
7. **FIRE DETECTION AND WARNING (051-007):** no coverage.
8. **GPS Navigation System (051-008):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: \*navigation system head, \*dash mounted control monitor, \*control monitor interface, \*control module diode, \*navigation system microphone, \*navigation system hard drive, \*display, \*modem, and \*start up disc. PART COVERAGE CLASS: \*navigation system microphone amplifier, \*navigation system speaker amplifier, \*antenna (navigation system, tri-mode, and covert), \*ECM module, \*navigation system control module, \*timed relay, \*out-of-truck notification siren, \*navigation system parking brake switch; ***wiring:*** \*peripheral connection harness, \*navigation system wiring, \*navigation system antenna cable, \*display connection cable, \*dual modem connection cable, \*engine cable, \*ethernet cable, \*power cable, and \*serial cable. PROGRESSIVE ONLY CLASS: batteries, decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s). NON-COVERED CLASS: Portable unit.
9. **FARE BOX (051-009):** no coverage.
10. **SPEEDOGRAPH (051-010):** no coverage.
11. **INFORMATION CENTER (051-011):** no coverage.
12. **DATA LOGGER (051-012):** no coverage.
13. **ON BOARD AIR PUMP (051-013):** no coverage.
14. **MANIFEST BOX (051-014):** no coverage.
15. **SPARE TIRE TOOLS (051-015):** no coverage.
16. **REAR MOUNTED BICYCLE RACK (051-016):** no coverage.
17. **HAND WASHER (051-017):** no coverage.
18. **FARE METER (051-018):** no coverage.
19. **SHRINK WRAP MOUNTING (051-019):** no coverage.

**CC. ELECTRICAL ACCESSORIES (052)**

1. **CIGAR LIGHTER (052-001):** no coverage.
2. **CLOCK (052-002):** no coverage.
3. **RADIO EQUIPMENT (052-003):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: \*radio, \*cassette radio, \*multiplexer, \*microphone, radio amplifier, \*radio internal thin film antenna, \*satellite radio antenna, \*radio antenna,

\*antenna base, \*radio auxiliary bluetooth display, \*antenna module, \*power antenna motor, \*radio speaker assembly; **gasket(s)**: \*antenna gasket, and \*speaker gasket. **PART COVERAGE CLASS**: \*radio amplifier, \*antenna power supply, \*radio antenna relay, \*radio power antenna switch; **wiring**: \*antenna lead assembly wire, \*radio cord, \*antenna coaxial cable, \*radio bluetooth protocol microphone cable, \*amplifier wiring harness, \*antenna wiring harness, and \*radio wiring harness. **PROGRESSIVE ONLY CLASS**: bezel, cover, grill, faceplate, remote control, SD Card, splitter box, static suppressor, surge protector, decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

4. **TAPE PLAYER (052-004)**: **SYSTEM COVERAGE CLASS**: N/A. **ASSEMBLY COVERAGE CLASS**: \*tape player assembly. **PART COVERAGE CLASS**: \*tape player wiring. **PROGRESSIVE ONLY CLASS**: decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
5. **TRANSMITTER - CB (052-005)**: no coverage.
6. **CD PLAYER (052-006)**: **SYSTEM COVERAGE CLASS**: N/A. **ASSEMBLY COVERAGE CLASS**: \*CD player assembly, \*CD player multi disc changer, \*disc changer cartridge, \*disc changer magazine. **PART COVERAGE CLASS**: \*CD player wiring harness. **PROGRESSIVE ONLY CLASS**: decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
7. **TELEVISION (052-007)**: no coverage.
8. **REFRIGERATOR (052-008)**: no coverage.
9. **SPEAKERS (052-009)**: no coverage.
10. **FAN - AUXILIARY (052-010)**: no coverage.
11. **AUXILIARY POWER (052-011)**: no coverage.
12. **CELLULAR TELEPHONE (052-012)**: no coverage.
13. **INTERCOM SYSTEM (052-013)**: no coverage.
14. **MICROWAVE OVEN (052-014)**: no coverage.
15. **DVD PLAYER (052-015)**: no coverage.
16. **HEATER AND COOLER - THERMOELECTRIC, PORTABLE (052-016)**: no coverage.
17. **HEATER - INTERIOR, ELECTRIC (052-017)**: no coverage.
18. **HEATER - LOWER RADIATOR HOSE (052-018)**: no coverage.
19. **PHONE DEVICE - HANDS FREE (052-019)**: no coverage.
20. **RADAR DETECTOR (052-020)**: no coverage.
21. **VIDEO MONITOR (052-021)**: no coverage.
22. **USB PORT (052-022)**: no coverage.
23. **BLU-RAY PLAYER (052-023)**: no coverage.
24. **COMPUTER TABLET (052-024)**: no coverage.

## **DD. HORN & MOUNTINGS & REVERSE SIGNAL ALARM (054)**

1. **HORN & MOUNTING (054-001)**: **SYSTEM COVERAGE CLASS**: N/A. **ASSEMBLY COVERAGE CLASS**: air horn diaphragm, air horn reed, air horn bell, air horn compressor, air horn to air horn valve, single air horn valve, \*electric horn, horn contact, horn contact spring, horn contact holder, horn valve cover, horn button cup, horn button spring seat, horn actuator cushion, and gasket/seal. **PART COVERAGE CLASS**: \*horn actuator, \*horn relay assembly, \*air horn switch, \*air horn solenoid, \*horn remote air control control, \*air horn remote air control solenoid; **wiring**: \*city horn wiring, \*air horn wiring harness, \*steering column horn wiring. **PROGRESSIVE ONLY CLASS**: splash guard, pull cable, decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s). **NON-COVERED CLASS**: siren amplifier, siren switch, siren motor (including clutch, cam, plate), siren speaker.
2. **ALARM (054-002)**: **SYSTEM COVERAGE CLASS**: N/A. **ASSEMBLY COVERAGE CLASS**: \*reverse signal alarm. **PART COVERAGE CLASS**: \*reverse signal alarm switch, \*reverse signal alarm wiring, \*parking aid control unit, and \*reverse motion sensor. **PROGRESSIVE ONLY CLASS**: decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s). **NON-COVERED CLASS**: siren amplifier, siren switch, siren motor (including clutch, cam, plate), siren speaker.

**3. ACOUSTIC VEHICLE ALERT SYSTEM (054-003):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: \*acoustic vehicle alert system speaker. PART COVERAGE CLASS: \*acoustic vehicle alert system electronic control unit (ECU), and \*acoustic vehicle alert system wiring harness. PROGRESSIVE ONLY CLASS: decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

**EE. POWER TAKE-OFF (PTO) (054)**

- 1. POWER TAKE-OFF (PTO) (054-001):** SYSTEM COVERAGE CLASS: PTO pump, PTO internal ring, split shaft spring; **bearing(s):** drive shaft bearing, closed end gear bearing, PTO bearing, end cap bearing cup, transmission mounted PTO bushing, split shaft bushing; **gear(s):** cluster gear, idler gear, PTO drive gear, output sliding gear, input sliding gear, drive ring gear; **shaft(s):** control shaft, drive shaft, output extension shaft, idler shaft, output shaft, solid shaft, stub shaft, tube shaft, split shaft, and output shaft key. ASSEMBLY COVERAGE CLASS: PTO hub, PTO drive chain, engine front PTO pulley, PTO actuating valve, \*PTO solenoid valve, output shaft thrust washer, PTO hydraulic tank; **housing/cover(s):** PTO case, cylinder housing, declutch housing, shaft support housing, closed end (cap assembly) cover, control cover, declutch housing cover, PTO split shaft housing cover, open end (cap assembly) cover, PTO valve cap cover; **gasket(s):** \*closed & output end bearing cap gasket, \*shift cover gasket, \*PTO mounting gasket, **seal(s):** \*output shaft seal, \*control shaft seal, \*PTO o-ring, \*split shaft o-ring. PART COVERAGE CLASS: \*PTO shaft universal joint, \*PTO air shifter regulator, \*PTO relay, \*PTO circuit board, \*PTO clutch switch, \*PTO limited switch, \*PTO shaft positioning switch, \*PTO pressure switch; **sensor(s):** \*PTO heat sensor, \*PTO speed sensor; **wiring:** \*signal wiring data module cable, \*PTO control wiring harness, \*PTO overspeed switch wiring harness, \*energized warning light harness, and \*engaged warning light harness. PROGRESSIVE ONLY CLASS: clutch disc, PTO clutch sleeve, PTO control lever, \*PTO control cable, PTO control cable knob, PTO warning lamp, PTO indicator lamp, belt(s), guard(s)/shield(s), decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
- 2. PNEUMATIC SHIFT (054-002):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: air shifter fork, air control piston, air shifter shaft, PTO shaft universal joint, PTO shaft end yoke, PTO shaft flange yoke, PTO Shaft slip yoke, PTO shaft weld yoke; **housing/cover(s):** air shift assembly cover, shifter cover; **gasket(s):** \*cylinder cap gasket; **seal(s):** \*shifter cover seal. PART COVERAGE CLASS: \*air shift indicator switch. PROGRESSIVE ONLY CLASS: decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
- 3. POWERSHIFT PTO (054-003):** SYSTEM COVERAGE CLASS: disc drive gear and reduction output gear. ASSEMBLY COVERAGE CLASS: powershift PTO input shaft, upper and lower output shaft, powershift PTO clutch piston, piston bore cylinder, pressure lube oil pump, lube oil pressure accumulator, lube oil heat exchanger, lube oil pressure relief valve, powershift PTO splendid valve, check valve, \*throttle valve; **gasket(s):** \*heat exchanger gasket; **seal(s):** \*output shaft debris cover seal, \*input seal, lube oil line seal, \*PTO piston seal; **housing/cover(s):** protection output shaft cover, powershift PTO valve and cap assembly cover, lube pump housing. PART COVERAGE CLASS: \*speed limited control module. PROGRESSIVE ONLY CLASS: friction disk, filter(s), breather(s), vibration dampener, clutch plates, clutch spring, clutch back up, debris cover, guard(s)/shield(s), decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

**EQUIPMENT DEPENDENT ATTACHMENTS GROUP**

**FF. MULTI-FUNCTION HYDRAULIC SYSTEMS (065) (if purchased)**

- 1. HYDRAULIC SYSTEMS (065-001):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: N/A. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: hydraulic system assembly, hydraulic pump, pump repair kit, decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), frame(s)/support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
- 2. HYDRAULIC SYSTEM ACCUMULATOR (065-002):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: accumulator diaphragm, accumulator piston, accumulator piston rings, accumulator spring, accumulator bushing, accumulator relief valve, accumulator housing, accumulator cover, and \*accumulator o-rings and seals. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s),

adapter/flange/mounting plate(s), frame(s)/support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

- 3. OIL COOLER (HEAT EXCHANGER) (065-003):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: hydraulic/\*electric cooler motor, cooler core, fan, fan hub, and cooler tank. PART COVERAGE CLASS: cooler bypass valve, and water shut-off valve. PROGRESSIVE ONLY CLASS: fan belt, decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), frame(s)/support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
- 4. HYDRAULIC SYSTEM CYLINDER (065-004):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: cylinder barrel, cylinder head, cylinder head bushing, cylinder rod, cylinder lock nut, rod pin, piston (plunger), cylinder rod end cap, cylinder rod guide (sleeve guide/collar guide), cylinder retaining ring, cylinder check valve; **seal(s) (aka hydraulic packing):** \*rod seal, \*wiper seal, \*piston seal, and \*piston o-ring. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: cylinder rod travel adjusting screw, cylinder mount end cap, air bleeder plug, hose guide pulley pin, decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), frame(s)/support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
- 5. DRIVE ASSEMBLY FOR MOTOR OR PUMP (065-005):** no coverage.
- 6. FILTERS, STRAINERS, SCREENS & HOUSING (065-006):** no coverage.
- 7. HOSES & FITTINGS (065-007):** no coverage.
- 8. HOSE (065-008):** no coverage.
- 9. ROTARY (SWIVEL) MANIFOLD (065-009):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: rotary manifold assembly, rotary manifold retaining ring, \*rotary manifold seals, and rotary manifold cover. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), frame(s)/support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
- 10. GEAR MOTOR (065-010):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: gear motor shaft or pin, gear motor shaft bearing, gear motor bushing, gear motor axial, gear motor axial bearing, gear motor gears, gear motor retaining ring, gear motor thrust washer, gear motor port plate; **housing/cover(s):** gear motor housing, gear motor cover; and **seal(s):** \*gear motor seals. PART COVERAGE CLASS: gear motor flexjoint (universal joint). PROGRESSIVE ONLY CLASS: decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), frame(s)/support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
- 11. PISTON TYPE MOTOR (065-011):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: piston motor shaft or pin, piston motor shaft bearing, piston motor shaft bushing, piston motor motor port plate, piston motor piston, piston motor axial bearing, piston motor retaining ring, piston motor thrust washer; **housing/cover(s):** piston motor cover, piston motor housing and **seal(s):** \*piston motor seals. PART COVERAGE CLASS: piston motor flexjoint (universal joint). PROGRESSIVE ONLY CLASS: decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), frame(s)/support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
- 12. CENTRIFUGAL (LOW PRESSURE TYPE) PUMP (065-012):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: centrifugal pump shaft or pin, centrifugal pump shaft bearing, centrifugal pump shaft bushing, centrifugal pump thrust washer, centrifugal pump impeller, centrifugal pump gear set, centrifugal pump motor port plate, centrifugal pump retaining ring; **housing/cover(s):** centrifugal pump housing, centrifugal pump cover; **seal(s):** \*centrifugal pump seal. PART COVERAGE CLASS: centrifugal pump flexjoint (universal joint). PROGRESSIVE ONLY CLASS: decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), frame(s)/support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
- 13. GEAR TYPE PUMP (065-013):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: gear pump shaft or pin, gear pump shaft bearing, gear pump shaft bushing, gear pump thrust washer, gear pump gear set, gear pump retaining ring, key drive sprocket, sprocket drive chain, pump drive pulley, hydraulic pump clutch hub; **housing/cover(s):** gear type pump housing, gear type pump cover, hydraulic pump cover; **seal(s):** \*gear pump oil seal, and \*gear pump line o-ring. PART COVERAGE CLASS: gear pump pressure relief valve, gear pump flexjoint (universal joint), \*power hydraulic pump switch, and \*hydraulic pressure gauge. PROGRESSIVE ONLY CLASS: decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s),

adapter/flange/mounting plate(s), frame(s)/support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

- 14. GEROTOR TYPE PUMP (065-014):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: gerotor pump shaft or pin, gerotor pump bearing, gerotor pump bushing, gerotor pump thrust washer, gerotor pump impeller, gerotor pump retaining ring; **housing/cover(s):** gerotor pump housing, gerotor pump cover; and **seal(s):** \*gerotor pump seals. PART COVERAGE CLASS: gerotor pump flexjoint (universal joint). PROGRESSIVE ONLY CLASS: decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), frame(s)/support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
- 15. VARIABLE DISPLACEMENT TYPE PUMP (065-015):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: variable displacement pump shaft or pin, variable displacement pump bearing, variable displacement pump bushing, variable displacement pump thrust washer, variable displacement pump cartridge, variable displacement pump dowel pin, variable displacement pump links, variable displacement pump retaining ring; **housing/cover(s):** variable displacement pump housing, variable displacement pump cover; and **seal(s):** \*variable displacement pump seals. PART COVERAGE CLASS: variable displacement pump flexjoint (universal joint). PROGRESSIVE ONLY CLASS: decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), frame(s)/support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
- 16. RECIPROCATING (DIAPHRAGM TYPE) PUMP (065-016):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: reciprocating pump shaft or pin, reciprocating pump bearing, reciprocating pump bushing, reciprocating pump piston, reciprocating pump diaphragm, reciprocating pump thrust washer, reciprocating pump retaining ring, reciprocating pump check ball, orifice, pump operating lever; **housing/case(s):** reciprocating pump housing, reciprocating pump cover; **gasket(s):** \*reciprocating pump gasket; **seal(s):** \*reciprocating pump o-ring. PART COVERAGE CLASS: reciprocating pump check valve, and reciprocating pump flexjoint (universal joint). PROGRESSIVE ONLY CLASS: decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), frame(s)/support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
- 17. HYDRAULIC SYSTEM RESERVOIR (065-017):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: N/A. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: reservoir tank, tank seals/gaskets, valves, oil feed manifold, strainer, clean out panel, breather/vent, filter element, breather filter, filler cap, filler cap chain, dipstick, drain plug, upper/lower check plug, fluid tubes, sight guage, decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), frame(s)/support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
- 18. BLEEDER VALVE (065-018):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: bleeder valve (body, stem, seat, vent tube, and stop screw). PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), frame(s)/support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
- 19. CHECK VALVE ASSEMBLY COMPONENTS (065-019):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: check valve body, check valve ball, check valve spring, check valve needle, check valve spring, check valve cartridge, \*check valve gasket, \*check valve seal, and \*check valve o-ring. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), frame(s)/support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
- 20. HYDRAULIC SYSTEM CONTROL VALVE (065-020):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: cylinder, cylinder head, control valve piston, control valve rod, control valve spool, control valve spring, control valve retaining ring, \*control valve electric motor, control valve body; **gasket(s):** \*control valve gasket; **seal(s):** \*yaw sensor seal, \*control valve seal, and \*control valve o-ring. PART COVERAGE CLASS: \*control valve solenoid, control air valve, control check valve; **switch(es):** \*micro switch, \*rotary switch, \*toggle switch; **sensor(s):** \*pressure sensor, \*temperature control sensor, \*height sensor, \*rotary position sensor, \*yaw sensor; and **wiring:** \*switch wiring. PROGRESSIVE ONLY CLASS: control valve lever, handle, knob, linkage, lever bushing, foot control, control cable, mounting seat, decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), frame(s)/support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).



- 21. COUNTERBALANCE VALVE (065-021):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: counterbalance valve body, counterbalance valve piston, counterbalance valve pin, counterbalance valve retaining ring, counterbalance valve spring, counterbalance valve spool, \*counterbalance valve gasket, \*counterbalance valve seal, and \*counterbalance valve o-ring. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), frame(s)/support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
- 22. HYDRAULIC SYSTEM MULTI-FUNCTION FLOW CONTROL VALVE (065-022):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: flow control valve body, \*flow control valve solenoid, flow control valve spool, flow control valve spool actuator pin, flow control valve spring, flow control valve wiper, \*flow control valve gasket, and \*flow control valve o-ring. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), frame(s)/support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
- 23. HOLDING VALVE (065-023):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: hydraulic holding valve assembly. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), frame(s)/support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
- 24. HYDRAULIC SYSTEM PILOT VALVE (065-024):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: pilot valve body, pilot valve piston, pilot valve seat, pilot valve stem, pilot valve spring, pilot valve adjuster, pilot valve cover, \*pilot valve gasket, and \*pilot valve seal. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), frame(s)/support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
- 25. PRESSURE BYPASS VALVE (065-025):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: pressure bypass valve assembly, \*pressure bypass valve gasket, \*pressure bypass valve seal, and \*pressure bypass valve o-ring. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), frame(s)/support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
- 26. REGULATOR VALVE (065-026):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: regulator valve body, regulator valve needle and seat, regulator valve spring, regulator valve diaphragm, regulator valve adjuster, \*regulator valve gasket, and \*regulator valve seal. PART COVERAGE CLASS: regulator valve pressure valve and \*regulator gauge. PROGRESSIVE ONLY CLASS: decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), frame(s)/support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
- 27. HYDRAULIC SYSTEM RELIEF VALVE (065-027):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: relief valve body, relief valve piston, relief valve adjuster, relief valve adjusting screw, relief valve seat, relief valve stem, relief valve spring, relief valve cover, \*relief valve gasket, \*relief valve seal, and \*relief valve o-ring. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), frame(s)/support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
- 28. HYDRAULIC SYSTEM WARNING DEVICES (065-029):** no coverage.
- 29. PROPULSION HYDRAULIC MOTOR (065-030):** no coverage.
- 30. HYDRAULIC CONTROLS (065-031):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: \*air control joystick, \*air/hydraulic control switch, \*air/electric control switch, \*air/hydraulic control solenoid, and \*air/electric control (MAC valve) solenoid. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), frame(s)/support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
- 31. VANE HYDRAULIC MOTOR (065-032):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: vane hydraulic motor. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s),

bracket(s), adapter/flange/mounting plate(s), frame(s)/support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

**GG. AUXILIARY POWER UNIT (APU) (151) (if purchased)**

- 1. AUXILIARY POWER UNIT (APU) COMPONENTS (151-001):** SYSTEM COVERAGE CLASS: APU camshaft gear, APU camshaft, APU camshaft bushing, APU camshaft pushrod, APU rocker arm, APU lifters, APU exhaust valve, APU intake valve, APU valve keepers, APU cylinder head valve guide, APU cylinder head rocker shaft, APU piston, APU piston pin, APU piston pin bushing, APU rings, APU connecting rod, APU connecting rod bearings, APU main bearings, APU crankshaft, APU crankshaft gear, APU thrust bearing, APU ring gear, APU gear key, APU idle gear shaft, APU fuel pump, APU fuel pick-up tube, APU fuel injection pump, APU fuel injection pump gear, APU fuel injection pump collar, APU fuel injection pump control lever, APU fuel injector, APU fuel injection valve, APU fuel injection valve fuel injection pipe, APU oil pump, APU oil pump inner and outer rotor, APU oil sump, APU crankshaft pulley, APU engine drive pulley, and APU idler pulley. ASSEMBLY COVERAGE CLASS: **housing/cover(s):** APU air filter housing, APU housing, APU oil sump oil seal housing, APU gear housing case, APU front access cover, APU battery box cover, APU top cover, APU bottom cover, APU upper enclosure, APU cylinder head cover, APU cylinder head filler cover, APU fuel injection pump cover, APU gear case cover, APU oil pump cover, APU oil sump cover, APU pre-cooler fan cover, APU thermostat cover, APU timing cover; **gaskets(s):** \*APU fuel filter cover gasket, \*APU cylinder head gasket, \*APU exhaust manifold gasket, \*APU exhaust gasket, \*bottom and front APU fuel injection pump cover gaskets, \*APU fuel pickup tube gasket, \*APU muffler gasket, \*APU cylinder head nozzle gasket, \*APU oil pan gasket, \*APU oil plug gasket, \*APU fuel injection valve return gasket, \*APU thermostat gasket, \*APU valve cover gasket, \*APU water pump gasket; **seal(s):** \*APU oil filler cap o-ring, \*APU fuel strainer o-ring, \*APU water pump o-ring, \*APU front and rear crankshaft seals, \*APU oil pump oil seal, \*APU sump pump oil seal, \*APU valve guide seal, and \*APU valve stem seal. PART COVERAGE CLASS: \*APU cylinder head, APU cylinder head spring and pin, water pump, water pump pulley, APU waterbleed shaft, \*APU thermostat, APU radiator, radiator filler cap, APU fan, APU fan clutch, APU surge tank, APU pre-cool fan, APU pre-cool coil, \*APU starter, \*APU alternator, APU alternator pulley, APU alternator fan, \*APU alternator cable, APU turnbuckle barrel, \*APU generator brushes, APU generator pulley, APU generator belt tensioner, APU flywheel, APU flywheel pulley, APU fuel injection valve check valve, \*APU blower motor, APU blower wheel, \*APU blower resistor, APU exhaust manifold, APU exhaust muffler, \*APU diesel particulate filter (DPF) regeneration blower motor, \*APU diesel particulate filter (DPF) heater contactor, APU ball valve, APU bleed valve, APU diaphragm valve, \*APU microprocessor, \*APU capacitor, \*APU relay, \*APU voltage regulator, \*APU circuit breaker, \*APU busbar, \*APU run solenoid, \*APU fuel injection pump stop solenoid, \*APU radiator fan switch; **sensor(s):** \*APU ambient air temperature sensor, \*APU battery temperature sensor, \*APU coolant temperature sensor, \*APU diesel particulate filter pressure sensor, RPM, APU RPM sensor; **wiring(s):** \*APU alternator wiring harness, \*APU wiring harness, \*APU HMI harness, \*APU ignition switch harness, \*APU inside air temperature harness, \*APU sensor harness, \*APU stand-by ignition lead harness, \*APU Power cable, and \*APU battery cables (positive and negative). PROGRESSIVE ONLY CLASS: APU hour meter, APU cylinder block, cylinder block repair sleeve, APU cylinder head breather baffle, APU oil pan, APU oil dipstick, fuel strainer, radiator fan shroud, battery, battery box, battery separator, belts, filter(s), filter element, drain plug, cap(s), warning buzzer, APU switch box, fuse(s), fuse holder, glow plug(s), insulation, cover knob, access panels, receptacles, exhaust tubes, ground strap, heat shields, handles, protectors, decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), stud(s)/pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
- 2. APU HEATING (151-002):** SYSTEM COVERAGE CLASS: APU heater blower motor, APU heater burner, APU heater core, APU heater heat exchanger, APU heater fuel pump, and APU heater water valve motor. ASSEMBLY COVERAGE CLASS: APU heater exhaust and inlet sleeves, APU heater water assembly valve; **housing/cover(s):** APU bottom heater cover, APU top heater cover; **gasket(s):** \*APU heater gasket, \*APU heater motor gasket, and \*APU burner gasket. PART COVERAGE CLASS: \*fuel heater external resistor, \*APU heater flame/overheat sensor, \*APU remote cab mounted temperature sensor, and \*APU heater wiring harness. PROGRESSIVE ONLY CLASS: heater fuel screen, heater inlet screen, heater warm air deflector, glow plug/glow pin, glow pin strainer, grommet(s), decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), stud(s)/pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).
- 3. APU COOLING AND AIR CONDITIONING (151-003):** SYSTEM COVERAGE CLASS: \*APU refrigerant compressor, APU A/C compressor manifold, APU compressor manifold suction orifice, APU evaporator, \*APU evaporator blower, APU evaporator coil, APU condenser coil, \*APU condenser fan, APU receiver drier, APU dehydrator, and \*APU A/C clutch. ASSEMBLY COVERAGE CLASS: \*APU evaporator freeze thermostat, APU drain valve, APU high pressure relief valve, APU expansion valve, APU A/C service valve; **housing/cover(s):** APU binary switch cover, APU condenser fan cover, APU evaporator cover, APU blower housing, APU evaporator housing; **gasket(s):** \*APU ductwork gasket, \*APU blower gasket; **seal(s):** \*APU A/C line compressor o-ring, and \*APU A/C compressor manifold o-ring. PART COVERAGE CLASS: \*APU binary switch, \*APU high and low pressure

cut off switches, \*APU pre-cooler fan switch, \*dehydrator switch, \*APU coolant arctic switch, \*APU evaporator temperature sensor, and \*APU HVAC wiring harness. PROGRESSIVE ONLY CLASS: belt(s), filter(s), duct(s), louver(s), frame(s), cage(s), air filter grille, suction resistor, decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), stud(s)/pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

**4. APU SUPPORT (151-004):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: N/A. PART COVERAGE CLASS: N/A. PROGRESSIVE ONLY CLASS: frame(s), drawer(s), decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), stud(s)/pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

**5. APU CONTROLS (151-005):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: \*control box cover and \*HMI harness wire seal. PART COVERAGE CLASS: \*APU control module, \*APU electrical controller, \*APU climate control unit (CCU), \*APU control box, \*APU PC interface board; **sensor(s)**: \*APU current sensor, \*APU controller sensor; **switch(es)**: \*APU blower switch, \*APU interconnect switch, \*APU mode control switch, \*APU oil pressure switch, \*APU on/off switch, \*APU pressure switch, \*reset assembly switch, \*APU rocker switch, \*stand-by switch, \*APU temperature control switch, \*APU trinary switch, \*APU water temperature switch; **wiring**: \*APU thermostat wiring harness, \*APU HMI (Human Machine Interface) harness and pin, and \*pump primer harness. PROGRESSIVE ONLY CLASS: software, APU control panel, control knob, decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), stud(s)/pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).

**6. APU INVERTER (151-006):** SYSTEM COVERAGE CLASS: N/A. ASSEMBLY COVERAGE CLASS: N/A. PART COVERAGE CLASS: \*inverter ground cable, \*inverter positive cable, \*inverter negative harness, and \*inverter power harness. PROGRESSIVE ONLY CLASS: decal(s), boot(s), plug(s), wiring, spring(s), fitting(s), snap ring(s), clip(s), clamp(s), coupling(s), link(s), connector(s), retainer(s), stud(s)/pin(s)/dowel(s), shim(s)/spacer(s), cap(s), line(s)/pipe(s)/hose(s), bracket(s), adapter/flange/mounting plate(s), support(s), mounting hardware, washer(s), nut(s), screw(s)/bolt(s), and washer(s).