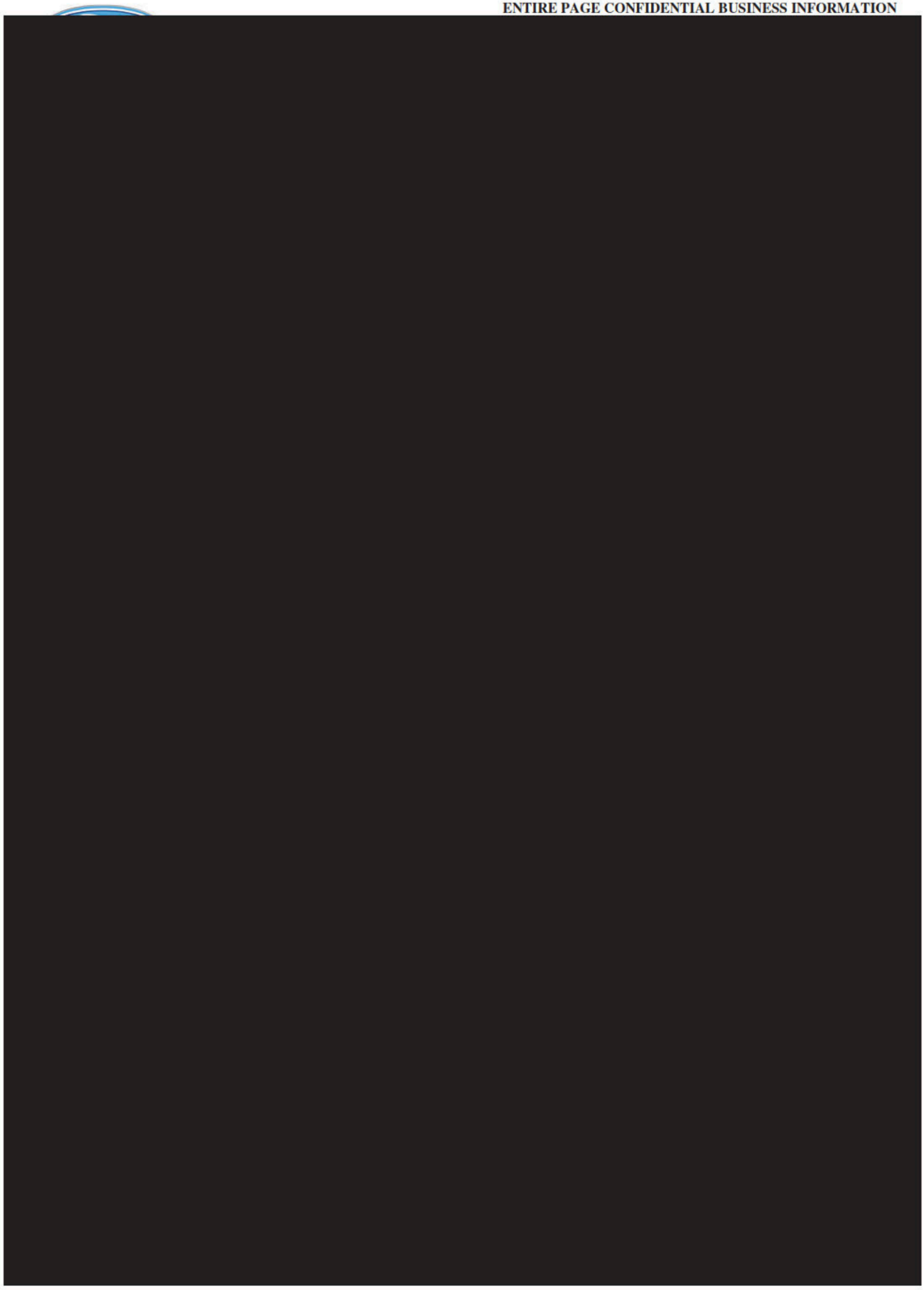

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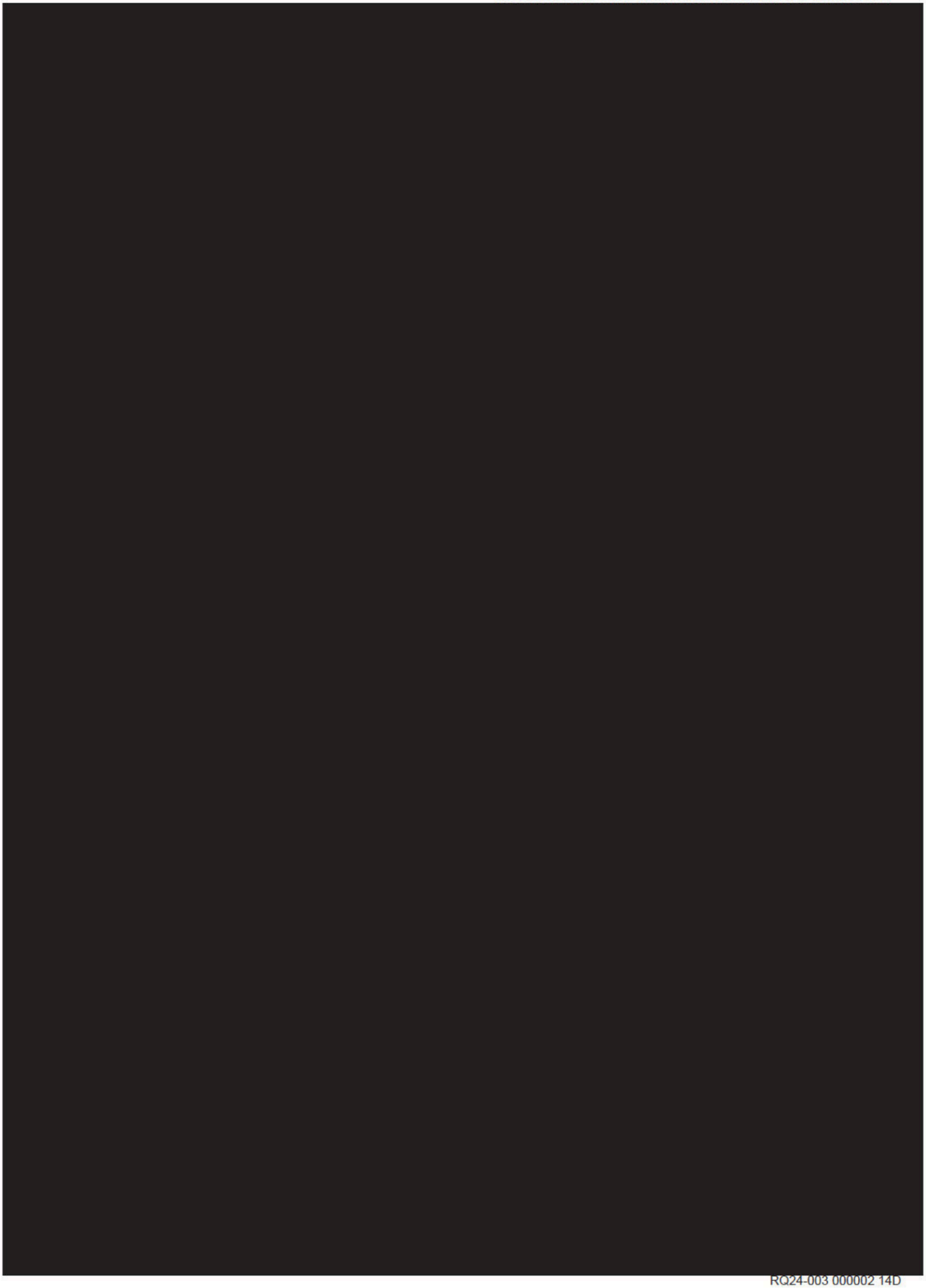

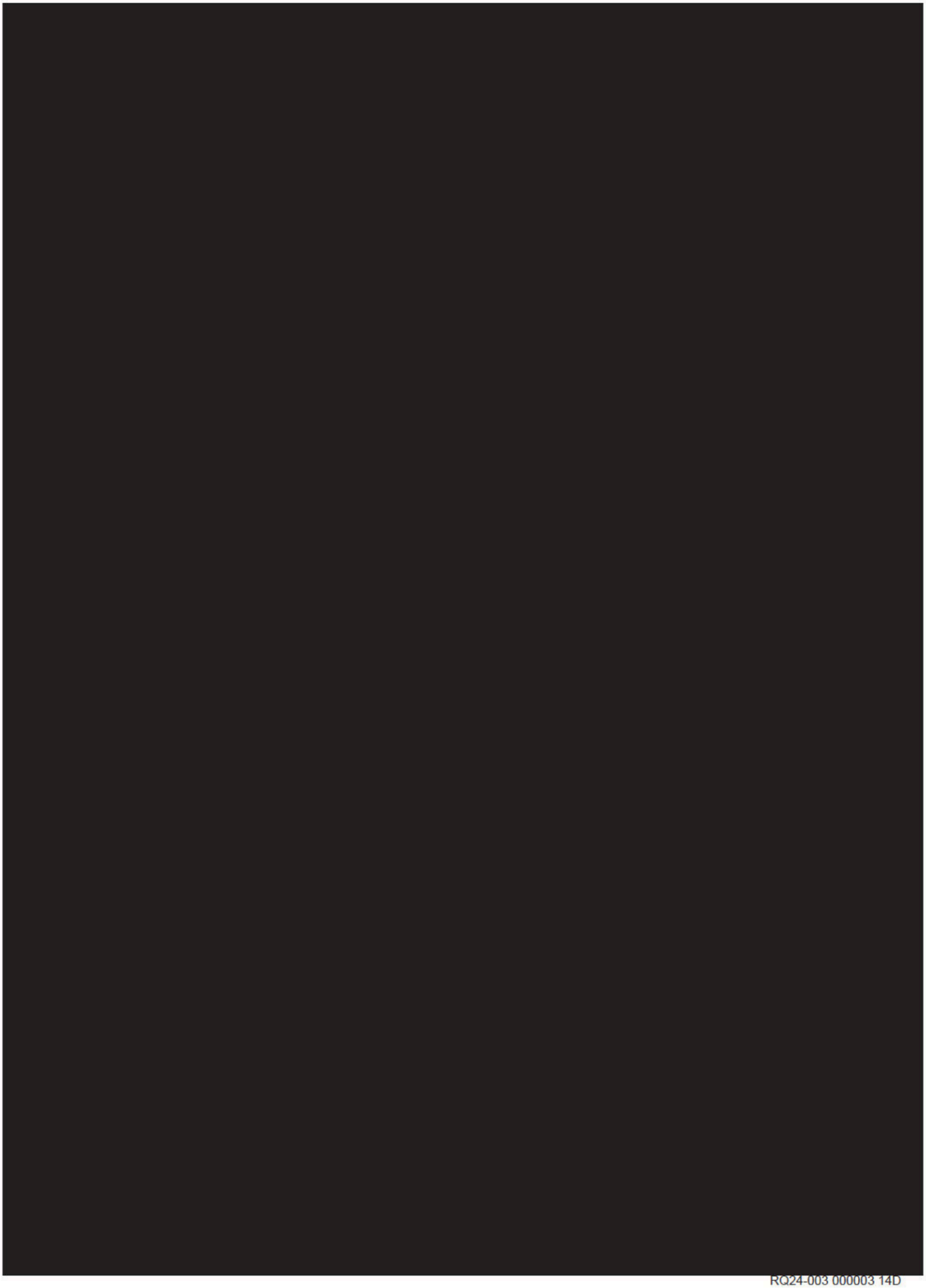

10. PROGRAM PARTS AND/OR SOFTWARE SIGN OFF/AVAILABILITY

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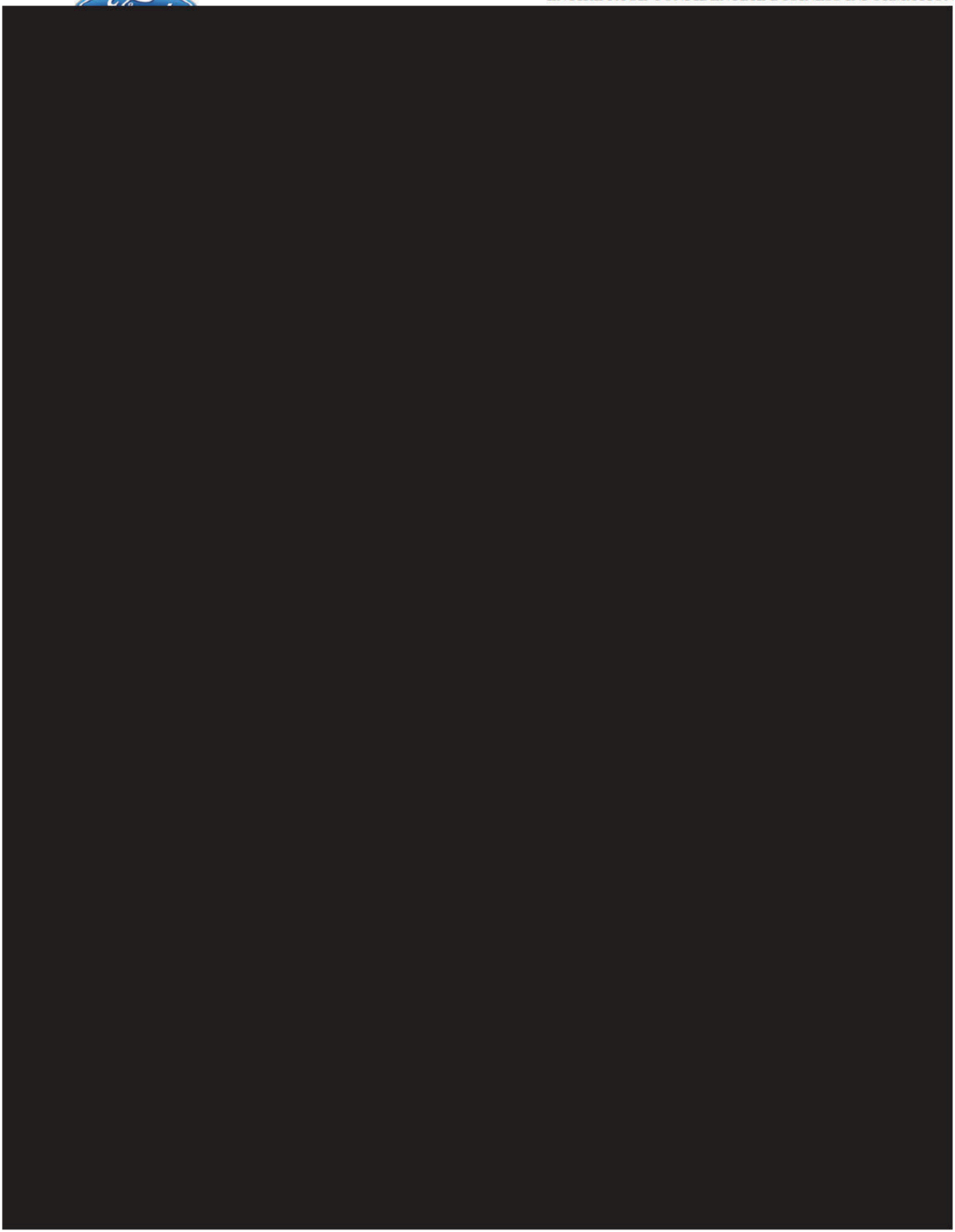
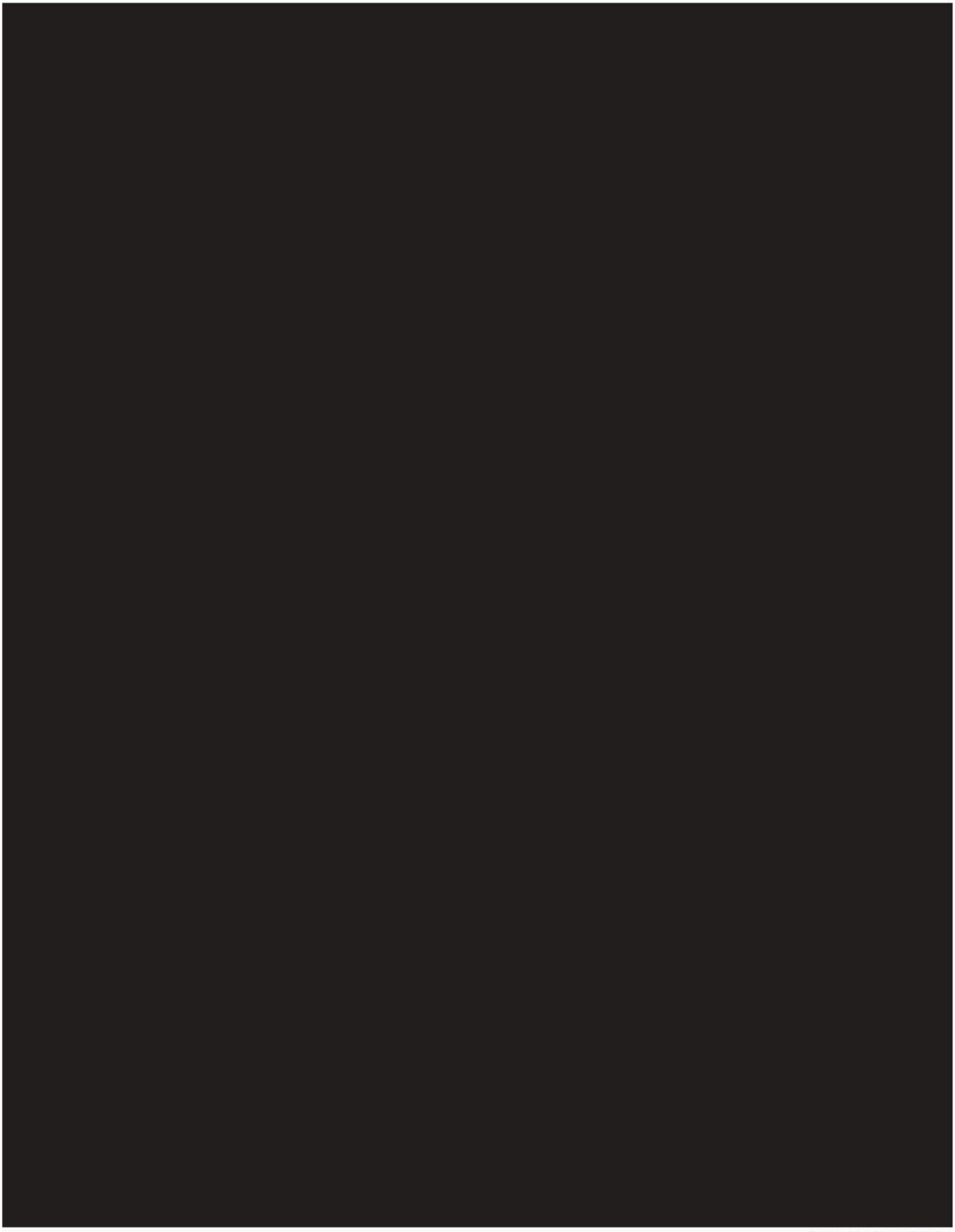
11. VENDOR INVOLVEMENT

This card is in pending status ...

12. FINANCIAL IMPLICATIONS

This card is in pending status ...





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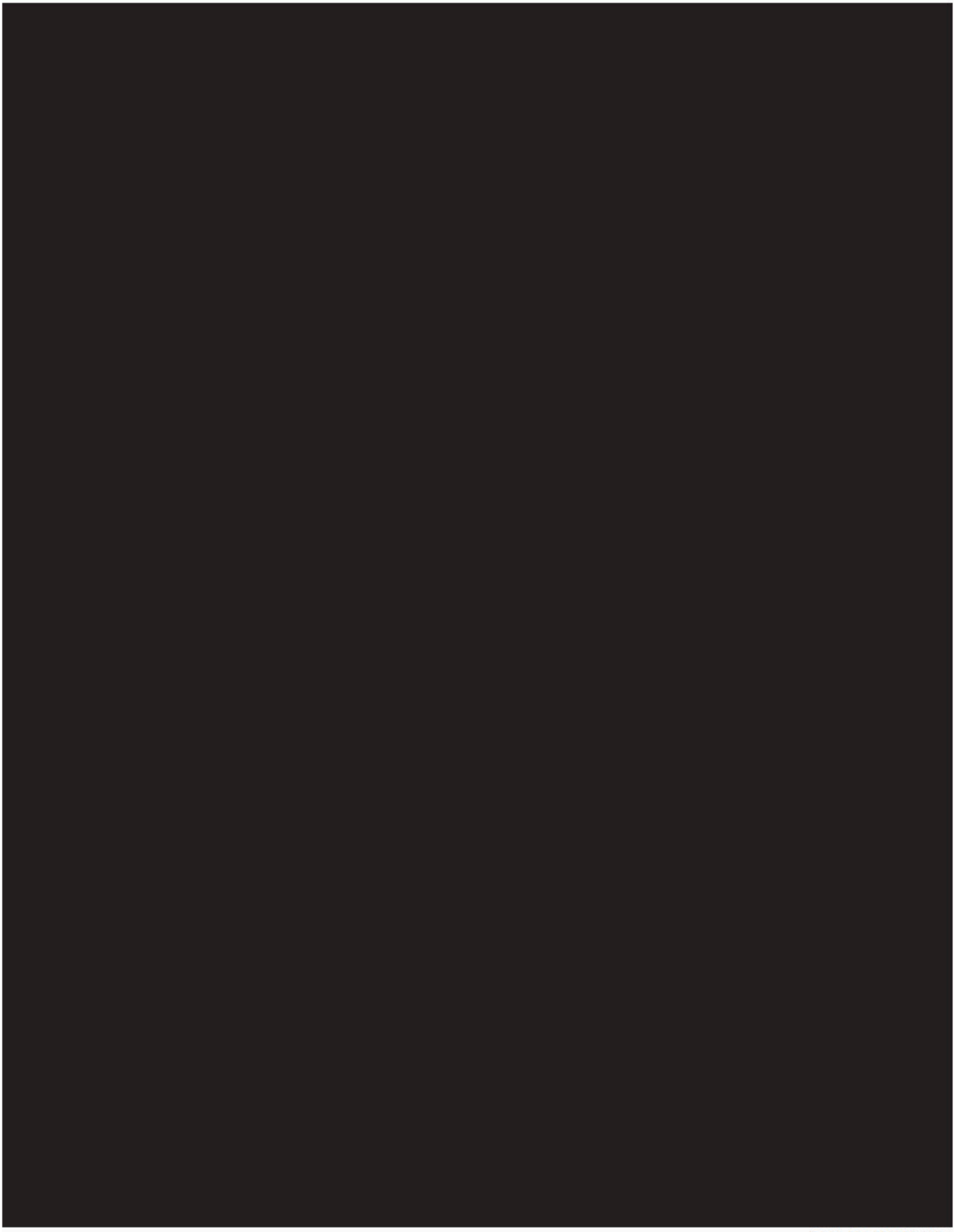

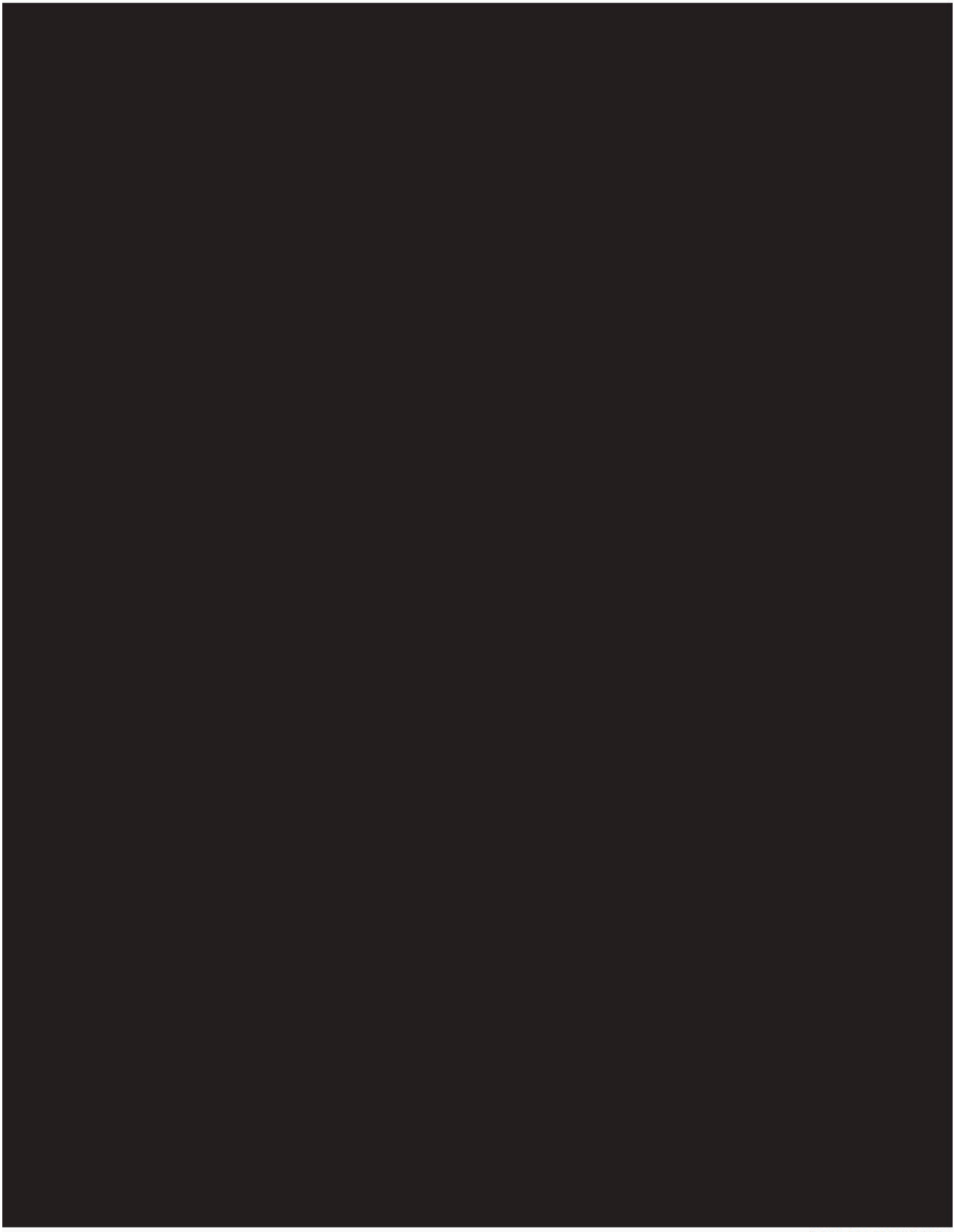

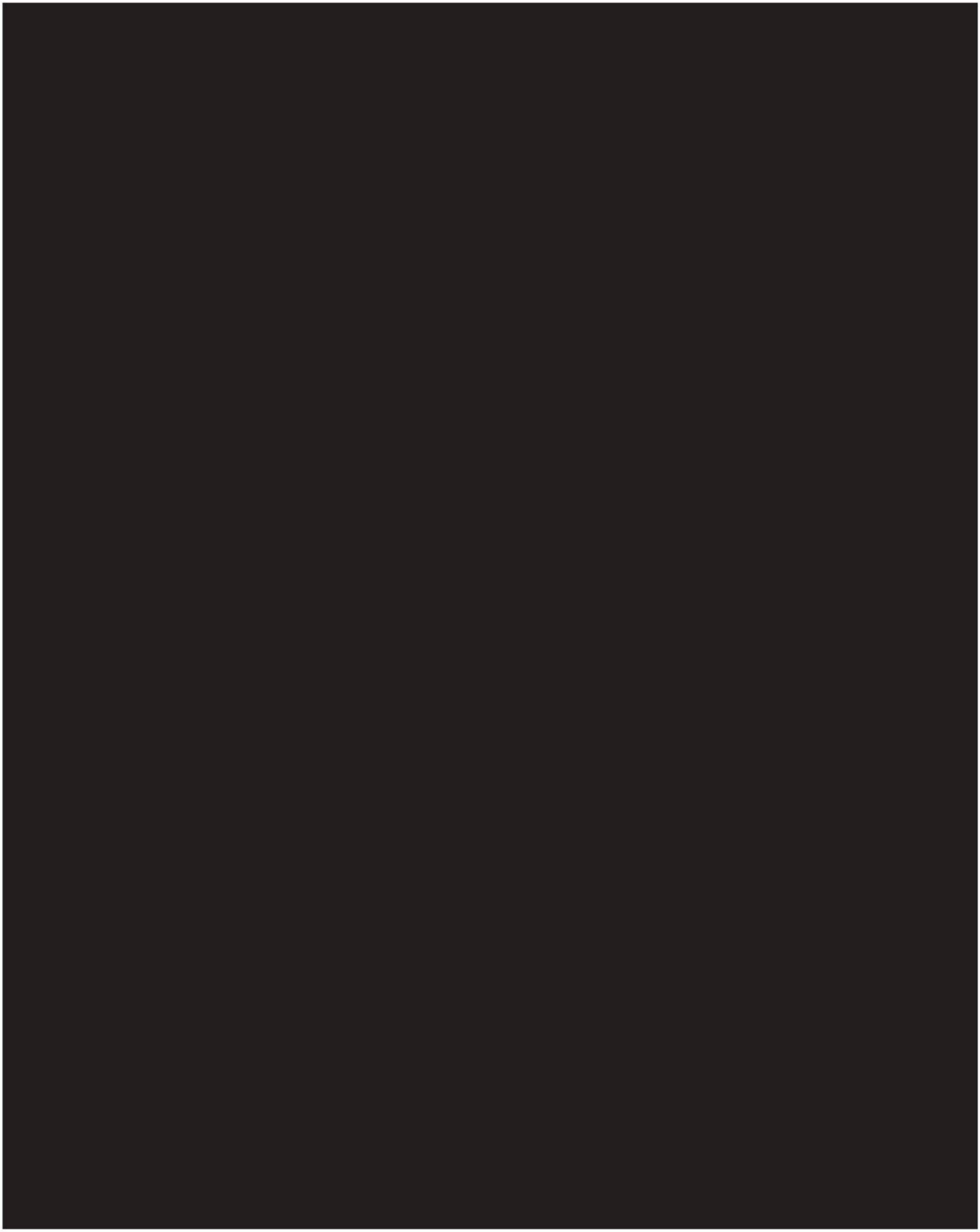

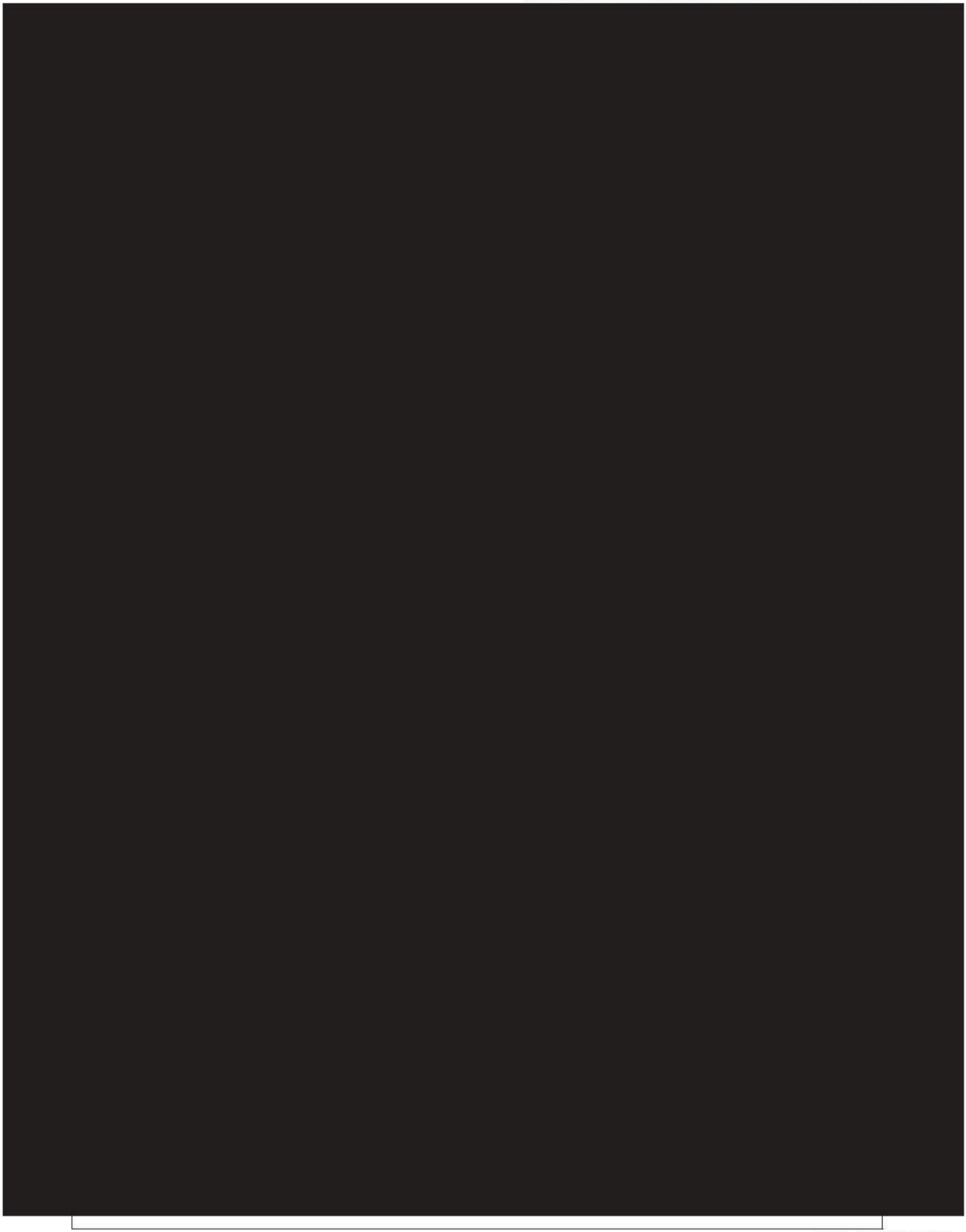

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Concern Investigation Summary
MY *21-22 E-Series*
Hydroboost Line Leaks Investigation (Post FSA 22S08)
GRID ID - *23-567*

Review Forum - *TRG*
Review Date – *24-Jan-2023*
Presenter: Luis Avila / Mike Puleri

Lead Root Cause Organization – *PD Hydraulic Steering*
Lead Region - *FNA*
Issue Owner – *Luis Ricardo Avila Magana / lavilama@ford.com*

Turn Around Automotive Operations

Modernize Everywhere

Disrupt Ourselves

F2021-003 000014 14D

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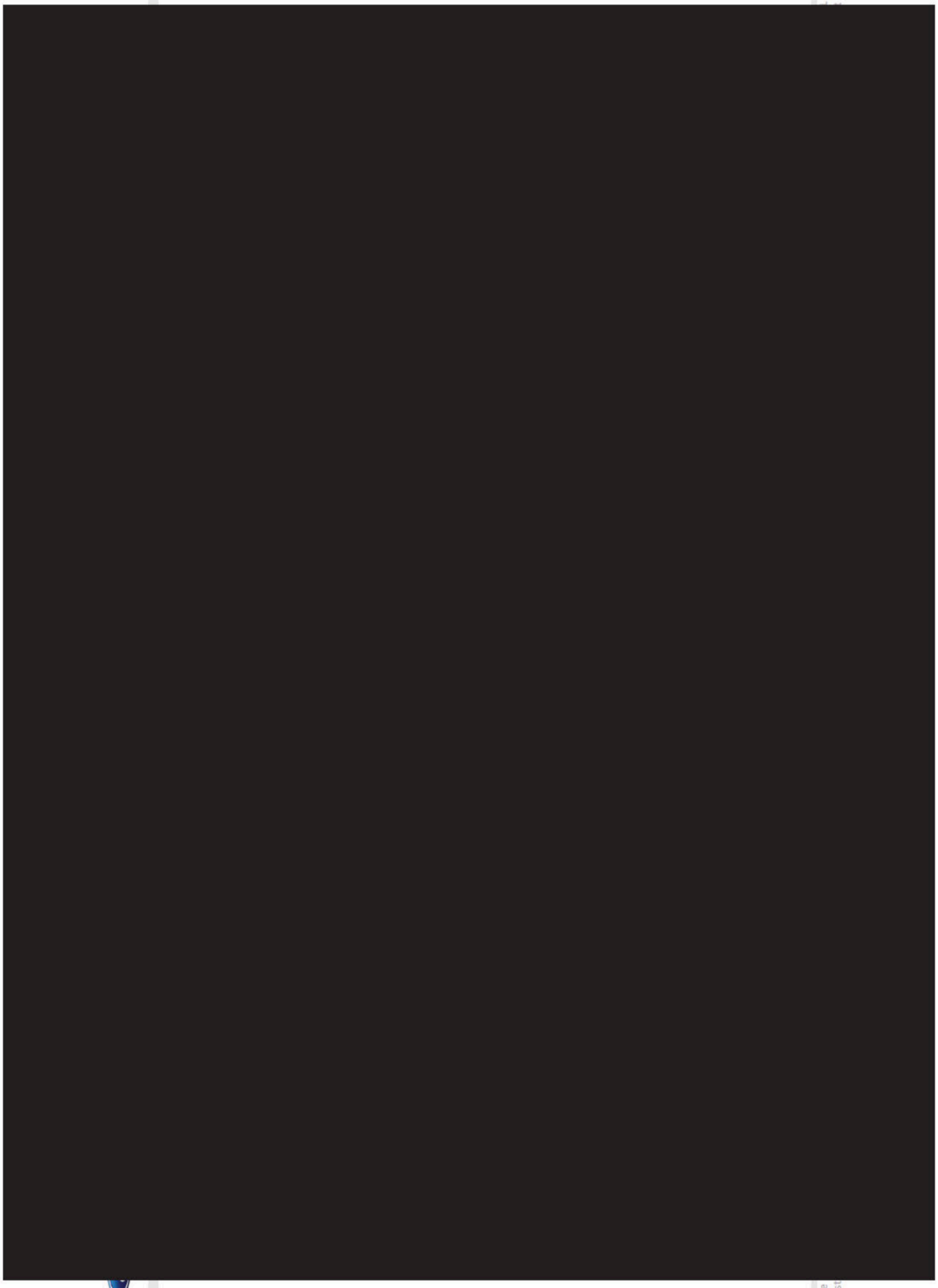

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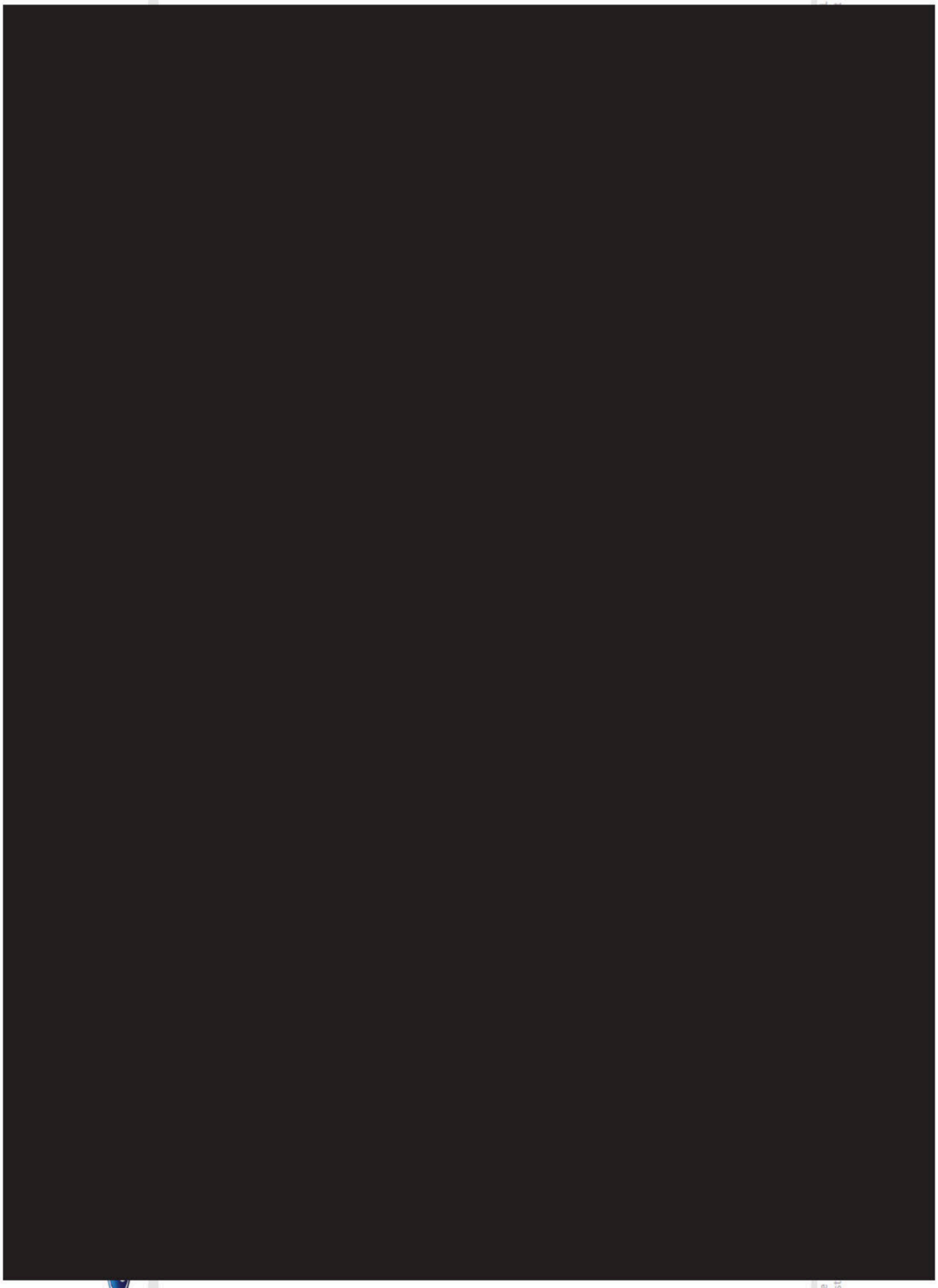

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GIS2 Classification: CONFIDENTIAL
GIS1 Item Transient

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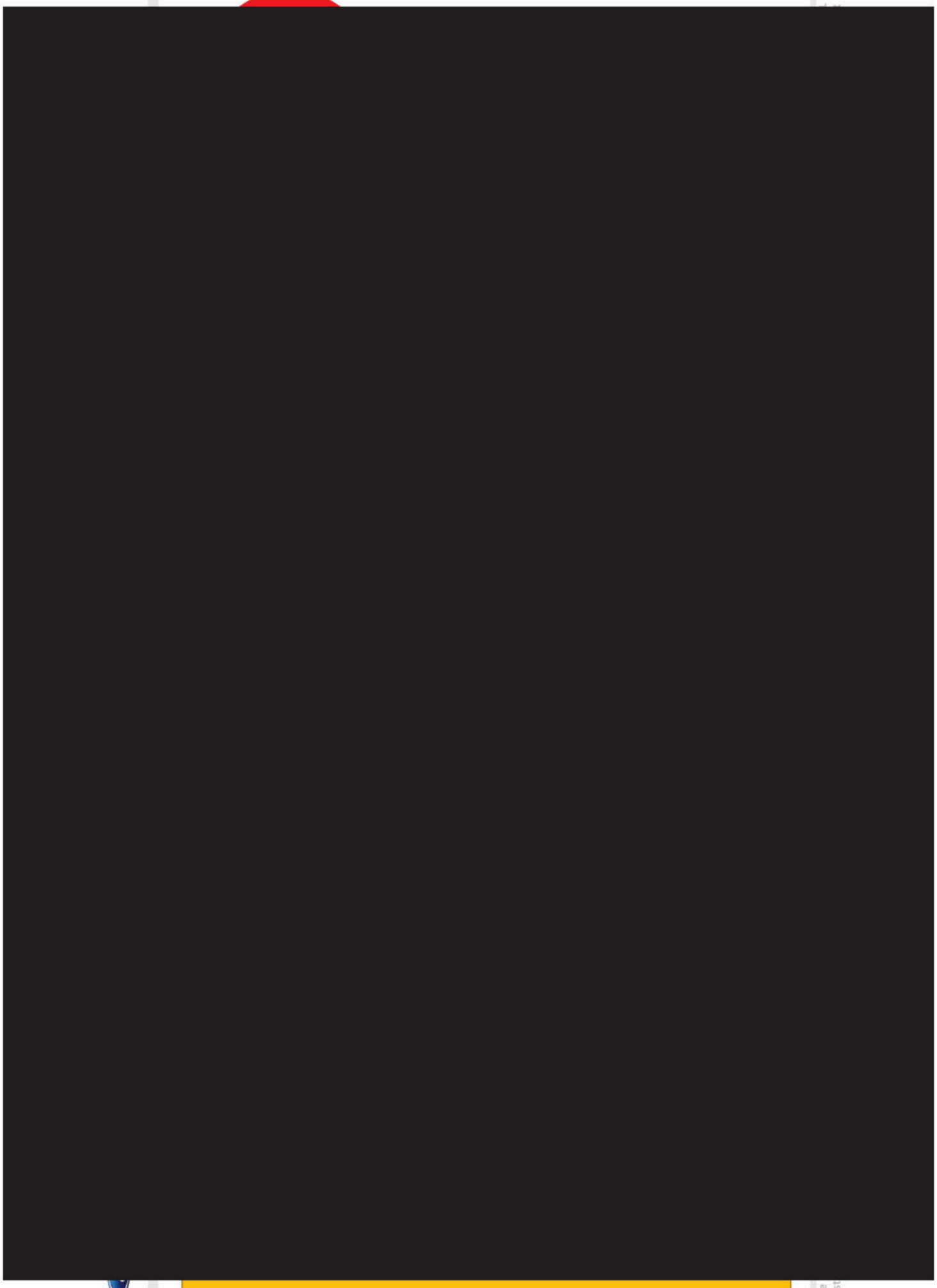

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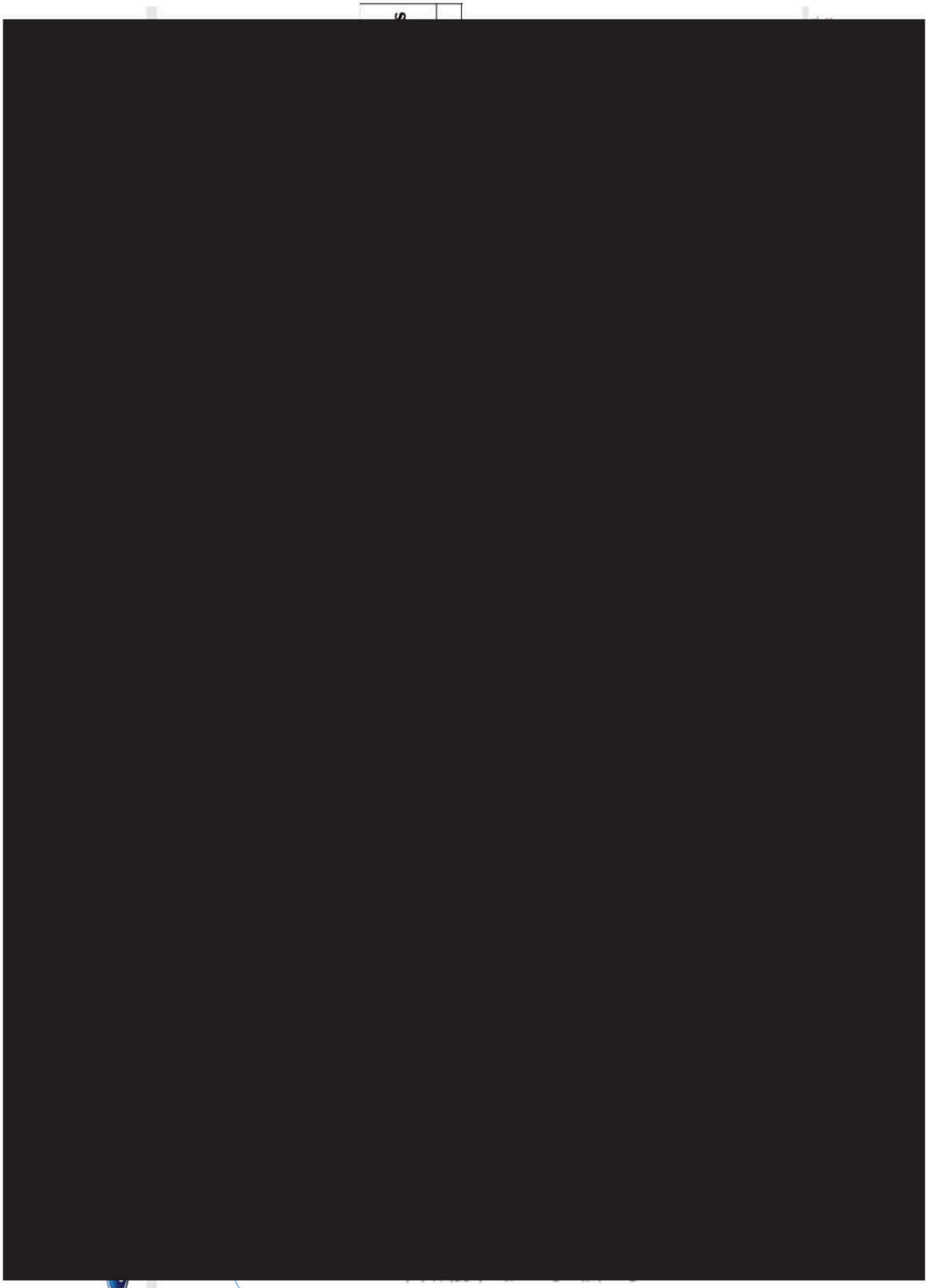

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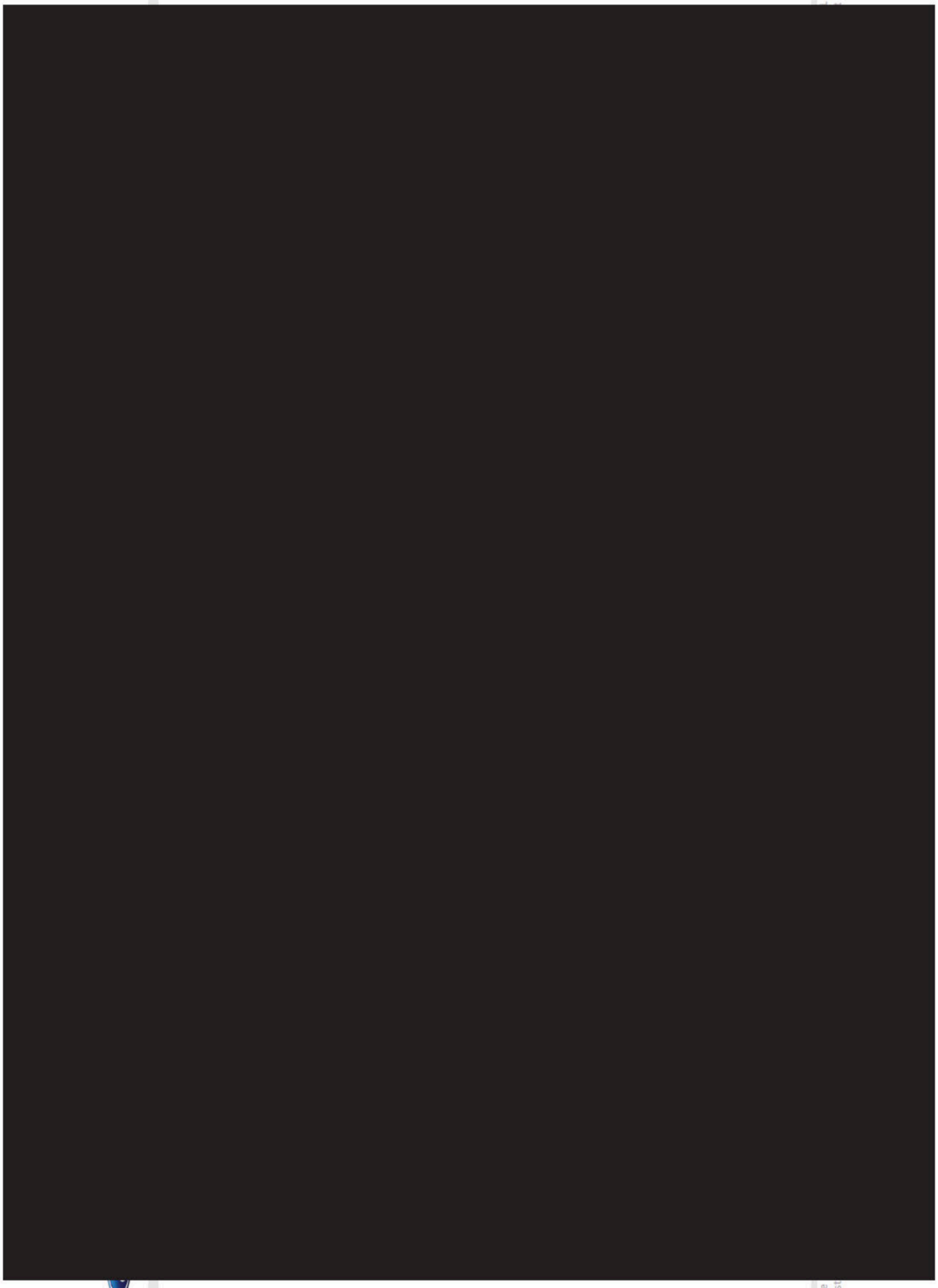

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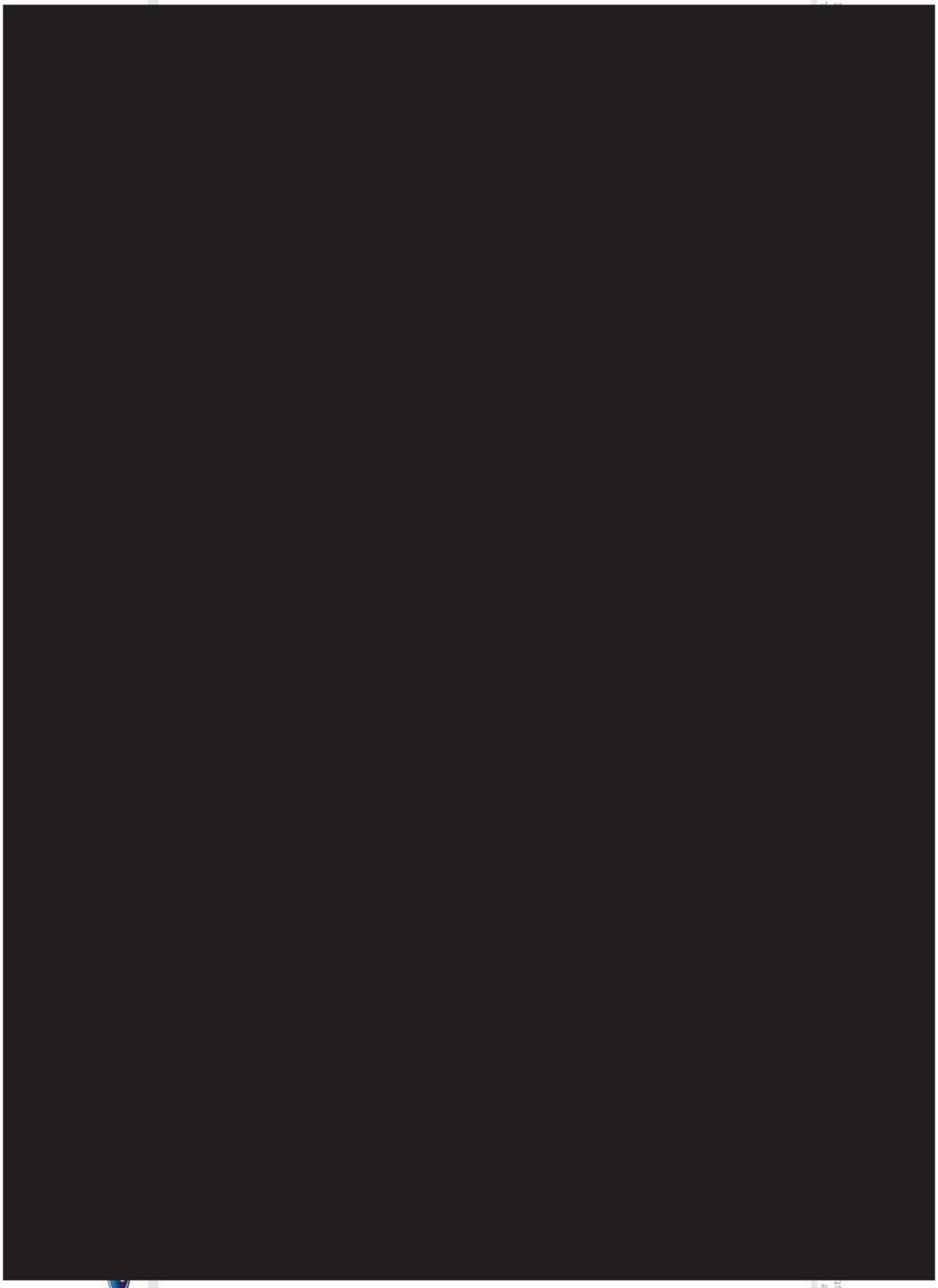

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FIGURE 2B

3. Is the vehicle equipped with new or original Hydromax pressure line and hydraulic booster jumper line?

   - **NEW** Hydromax pressure line and **NEW** hydraulic booster jumper line - No Further Action is Required.
   - **OLD** Hydromax pressure line and **OLD** hydraulic booster jumper line - Proceed to Step 4.
   - **OLD** Hydromax pressure line and **NEW** hydraulic booster jumper line - Proceed to Hydro-Boost Line Replacement Procedure, on Page 5.
   - **NEW** Hydromax pressure line and **OLD** hydraulic booster jumper line - Proceed to Hydro-Boost Line Replacement Procedure, on Page 5.

Hydro-Boost Line Replacement Procedure

IMPORTANT! If Hydro-Boost line replacement is required the Hydro-Boost line jumper will also need to be replaced. DO NOT bend the lines to fit the new line to old jumper. See Figure 4.

1. Remove the hydraulic booster jumper line bracket nuts and bracket. Please follow the Workshop Manual (WSM) procedures in Section 211-02 Power Steering > Removal and Installation > Power Steering Pump to Hydromax Pressure Line, Exploded View for illustration.

2. Remove the hydraulic booster jumper line from the hydraulic booster. Please follow the WSM procedures in Section 211-02.

3. Replace the power steering pump to hydromax pressure line and hydraulic booster jumper line. Please follow the WSM procedures in Section 211-02.

4. Reinstall the jumper line bracket and nuts. Please follow the WSM procedures in Section 211-02.

IMPORTANT NOTE: Federal law prohibits selling motor vehicle parts or components that are under safety, compliance, or emissions recall. Unless a part is requested to be returned to Ford, all parts replaced under this FSA must be scrapped in accordance with all applicable local, state and federal environmental protection and hazardous material regulations. Refer to the Parts Retention, Return, & Scrapping section of the FSA dealer bulletin for further information.

VOQ's brought from Trend and Early Warning team

ODI 11530672 The contact owns a 2021 Ford E-350. The stated while driving into the driveway, the vehicle made an abnormal popping sound. The vehicle lost power steering functionality, and the brake pedal became spongy. Additionally, the contact stated that there was a trail of fluid in the driveway. The contact stated that upon opening the hood, he noticed that the brake line had fractured, and brake fluid was leaking inside the engine compartment. There was no further information provided. The manufacturer was notified of the failure and referred the contact to a dealer; however, the dealer could not accommodate the vehicle. The dealer was contacted and diagnosed the vehicle at the contact's residence. The dealer determined that unknown hoses needed to be replaced and the failure was related to NHTSA Campaign Number: 22V089000 (Steering, Service Brakes, Hydraulic). The dealer and the manufacturer informed the contact that the vehicle could not be covered under the recall as the recall was previously marked as complete. The contact stated that the dealer had not completed the recall repair on the vehicle. The vehicle was not repaired. The failure mileage was approximately 40,000.

ODI 11483429 The contact owns a 2022 Ford E-350. The contact stated that while driving approximately 65 MPH, the steering wheel became stiff and the vehicle would pull in either direction. Additionally, and there was an abnormal odor inside the cabin of the vehicle. The contact then noticed that the brake pedal had to be pressed very hard in order to stop the vehicle. After stopping to inspect under the hood, the contact discovered a power steering fluid leak in the engine compartment. The vehicle was driven to the local dealer who diagnosed that the power steering pressure line had detached. The vehicle was not yet repaired. The manufacturer was not yet notified of the failure. The contact indicated that the vehicle was previously repaired under the NHTSA Campaign Number: 22V089000 (Steering, Service Brakes, Hydraulic). The failure mileage was 6,300.

ODI 11471820 The contact owns a 2021 Ford E-350. The contact stated that the vehicle was included in NHTSA Campaign Number: 22V089000 (Steering, Service Brakes, Hydraulic) and the vehicle was inspected. During the inspection there was no leaks found. The contact stated while driving approximately 65 MPH after the inspection, the vehicle lost power steering functionality. The contact coasted the vehicle off the highway. The contact stated that while driving afterwards and attempting to depress the brake pedal, the vehicle failed to respond as designed. The contact pulled over and had the vehicle towed to the dealer where the recall repair was completed. The manufacturer was made aware of the failure. The approximate failure mileage was 10,800.

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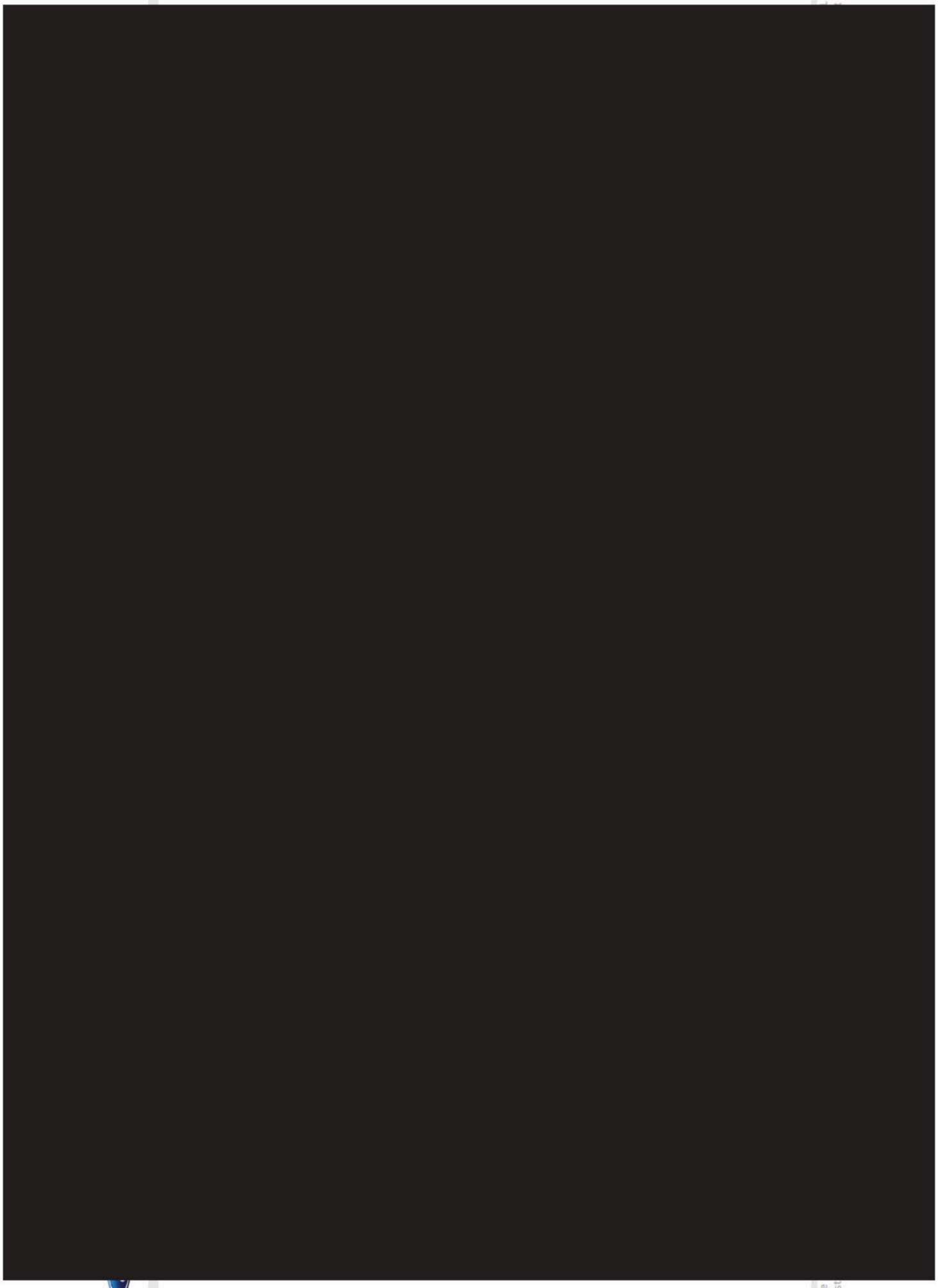

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22S0B Failed Inspection Example

VIN [redacted]

63,442 Miles, 5/2/2022

PERFORMED FORD CAMPAIGN 22S08 HYDROBOOST OR HYDROMAX POWER STEERING PRESSURE LINE INSPECTION.UNIT HAD OLD STYLE Hydromax pressure line and OLD STYLE hydraulic booster jumper line.LINES DID SEPARATE AND THE GAP IS GREATER THAN 3MM AND DID DISCONNECT UNDER 8.85 lb-ft PRESSURE.UNIT FAILED INSPECTION.REPLACED LINES AS PER CAMPAIGN INSTRUCTIONS, and cleaned under hood for lines that were disconnected.

22S08A Returned Vehicle Example #1

VIN: [redacted]

2,243 Miles, 3/30/2022

"c/s perform open recall 22s08. As per Recall 22s08: Inspected hydromax pressure line and hydraulic booster jumper line. Determined both lines to be "old style". Applied 8.85 lb ft as described in recall in an attempt to separate line connection. Line did not disconnect. Attempted to insert 3mm brake gauge into gap. Gap smaller than 3mm. Based on test results no further action is required and vehicle does not require part replacement. Safe to be released to customer."

9,382 Miles, 7/26/2022

"2 power steering lines are leaking and need to be replaced FOUND LEAKING POWER STEERING LINES. installed 2 new power steering lines"

22S08A Returned Vehicle Example #2

VIN: [redacted]

3,452 Miles, 4/19/2022

"performed recall 22s08 hydroboost or hydromax power steering pressure line inspection. inspected jumper line and hose, hose and jumper line are of old design. put 12nm of pressure on line and line did not release. measured gap, gap is smaller than 3mm. no repairs needed at this time, line and jumper passed inspection."

4,293 Miles, 11/21/2022

"Verified, vehicle is leaking power steering fluid. ran oasis, no open publications. inspected and found high pressure line from booster to gear has blown, will need to replace jumper line and pressure line and fill with new fluid. replaced line from pump to hydro boost and replaced line from hydro boost to pressure line. filled and bled power steering fluid. cleaned engine area adn road tested. vehicle operating properly, no leaks. repair verified."

22S08A Returned Vehicle Example #3

VIN: [redacted]

3,774 Miles, 5/14/2022

"INSPECTED POWER STEERING HOSES, PASSED PER 22S08."

3,779 Miles, 5/31/2022

"MT FOR POWER STEERING PRESSURE HOSE AND CLEAN ENGINE BAY. INSPECTED POWER STEERING SYSTEM FOR LEAKS. FOUND POWER STEERING HOSE LEAKING AT O-RING IDENTIFIED IN RECALL 22S08. REPLACED LEAKING POWER STEERING PRESSURE HOSE AND JUMPER LINE TO CORRECT LEAK. CLEANED ENGINE BAY AFTER REPAIR."

22S08A Returned Vehicle Example #4

VIN: [redacted]

25,112 Miles, 4/1/2022

"PERFORMED FORD CAMPAIGN 22S08 HYDROBOOST OR HYDROMAX POWER STEERING PRESSURE LINE INSPECTION.LINE DID NOT SEPARATE AND THE GAP IS LESS THAN 3MM.UNIT PASSED INSPECTION WITH NO FURTHER ACTION NECESSARY."

33,486 Miles, 8/6/2022

"Complaint: LEAKING POWER STEERING FLUID Cause: METAL LINE GOING TO THE GEAR BOX IS LEAKING POWER STEERING FLUID; LINE END FAILED"

22S08A Returned Vehicle Example #5
LEAKING SEAL

VIN: [redacted]

4,018 Miles, 4/26/2022

"PERFORMED FACTORY RECALL 22S08 HYDRO BOOST POWER STEERING PRESSURE LINE INSPECTION= PASSED"

8,711 Miles, 4/23/2023

"VERIFIED POWER STEERING LEAK REPLACED POWERSTEERING PRESSURE LINE AND UPDATED JUMPERLINE TO MATCH NEW PRESSURE LINE. NECESSARY TOREPLACE POWER STEERING PUMP DUE TO DAMAGEFROM RUNNING WITHOUT FLUID. POWER STEERING PUMP SEAL LEAKING. MTIME NEEDED. NO TIMEIN SLTS FOR POWER STEERING LINE OR 3A674."

22S08A Returned Vehicle Example #6

VIN: [redacted]

4,583 Miles, 01-NOV-2022

"Inspected power steering connection - PASS 22S08A 0.3"

6,263 Miles, 12-APR-2023

"MT3A717 1.4 TO REPALCE THE HOSE, JUMP AND STEAM OFF THE FLUID WENT OUT AND INSPECTED POWER STEERING LINE AND FOUND THE LINE BLEW OUT OF THE CONNECTION. LOOKED UP PREVIOUS REPAIR HISTORY AND FOUND THAT RECALL 22S08 WHICH IS FOR THE EXACT ISSUE THAT HAS ACCURED HAD BEEN DONE PREVIOUSLY AT ANOTHER DEALERSHIP. ORDERED PARTS. REPLACED JUMPER LINE AND PRESSURE LINE. BLED POWER STEERING SYSTEM AND TOOK VEHUICLE ON TEST DRIVE AND FOUND NO ISSUES. NEED TO WASH THE VEHICLE OFF WASHED OFF FLUID FROM INSIDE THE ENGINE BAY AND TOOK FOR ANOTHER TEST DRIVE AND CHECKED FOR LEAKS AND FOUND NONE"

22S08A Returned Vehicle Example #7

VIN: [redacted]

16,240 Miles, 01-DEC-2022

Customer Comment: "22S08 FOR HYDROBOOST INP AND LINE INSP.CUST ADVISES ALREADY BLEW OUT"

Tech Comment: "PERFORMED 22S08. VEHICLE IS EQUPT WITH OLD HYDRAULIC BOOSTER JUMPER LINE AND OLD PRESSURE LINE. PASS. STEP 4 REQUIRES FLAT BLADE SCREW DRIVER AND INSPECT FOR ANY SEPARATION IN LINE. PASS. STEP 5 REQUIRES 3MM BRAKE MEASURING GAUGE TO MEASURE LINE GAP. PASS. GAP IS NOT GREATER THAN 3MM. VEHICLE OK AT THIS TIME."

26,242 Miles, 12-DEC-2022

"HIGH PRESSURE POWER STEERING LINE HAS BLOWN OUT OF FITTING. EMPTIED SYSTEM WHILE CUSTOMER DRIVING VEHICLE FROM DEALER PARKING LOT. INSTALLED NEW UPDATED JUMPER LINE AND LINE. FILLED POWER STEERING SYSTEM. VEHICLE OK AT THIS TIME."

NHSTA Inquiry VIN

VIN: [redacted]

2,461 Miles, 05/05/2022

"Campaign number: 22S08 HYDROBOOST OR HYDROMAX POWER STEERING PRESSURE LINE INSPECTION"

8,360 Miles, 6/23/2023

"CP 3A719 MO 8369 INSPECTED VEHICLE, VERIFIED CONCERN. FOUND P/S PRESSURE LINE SEPARATED FROM FITTING AT HYDRO BOOST. REMOVED AND REPLACED LINE AND ELBOW ASSEMBLY. PERFORMED P/S PUMP FLOW AND PRESSURE TEST TO MAKE SURE NO PUMP DAMAGE. P/S PUMP IS OK, NO LEAKS PRESENT. TEST DROVE ALL OK"

VOQ Example

Load Date: 10-JULY-2023

ODI Source ID: 11509828

"The contact owns a 2021 Ford E-350. The stated while driving into the driveway, the vehicle made an abnormal popping sound. The vehicle lost power steering functionality, and the brake pedal became spongy. Additionally, the contact stated that there was a trail of fluid in the driveway. The contact stated that upon opening the hood, he noticed that the brake line had fractured, and brake fluid was leaking inside the engine compartment. There was no further information provided. The manufacturer was notified of the failure and referred the contact to a dealer; however, the dealer could not accommodate the vehicle. The dealer was contacted and diagnosed the vehicle at the contact's residence. The dealer determined that unknown hoses needed to be replaced and the failure was related to NHTSA Campaign Number: 22V089000 (Steering, Service Brakes, Hydraulic). The dealer and the manufacturer informed the contact that the vehicle could not be covered under the recall as the recall was previously marked as complete. The contact stated that the dealer had not completed the recall repair on the vehicle. The vehicle was not repaired. The failure mileage was approximately 40,000."

GSAR History shows 22S08 inspection passed 24-MARCH-2023

VOQ Example

Load Date: 11-DEC-2023

ODI Source ID: 11535359

"I am a mechanic at Huron Valley Ambulance. Ford has a recall that covers some of our Ambulances. Recall NO: 22S08 for the power steering lines coming apart. I have been having issues with the hoses coming apart even after the recall has been performed. The Ford dealer will not cover this repair after the recall has been done. This is a safety issue as both the steering and braking are effected. It is also time consuming and expensive to repair. I feel this recall is not correcting this problem and needs to be addressed. "

Most Recent VOQ

"The contact owns a 2022 Ford E 450 The contact had received notification of NHTSA Campaign Number 22V089000 (Steering, Service Brakes, Hydraulic) and the vehicle was taken to the dealer to be repaired under the recall The contact stated that the recall repair was not performed; however, the dealer inspected the vehicle and informed the contact that the recall repair was not needed, and that the vehicle was good to be driven The contact stated that while driving at an undisclosed speed, the power steering and the service brakes were inoperable The contact stated that the steering failed to function as intended Additionally, the contact stated that while depressing the brake pedal, the brakes failed to respond as needed The contact was able to stop the vehicle The vehicle was towed to Castle Ford in Michigan City The vehicle was diagnosed with failed power steering connection line and a failed brake hydro boost unit The vehicle was then repaired under NHTSA Campaign Number 22V089000 (Steering, Service Brakes, Hydraulic) The contact stated that the failure occurred thirty days after the vehicle was serviced at the dealer and the dealer declined to complete the recall repair The contact stated that the failure occurred while out of town The manufacturer was made aware of the failure and a case was filed The failure mileage was approximately 4,000"

Confirmed Passed on 21-AUG-2023

Return Failure Repair on 08-OCT-2023

Warranty Start Date 23-MAR-2021

[redacted]

Type	Practice_Area	Case_No	Claimant_Name	Incident_Date	Notice_Date	Make
Claim	Product	[redacted]		3/3/2022	3/28/2022	Ford
Suit	Class Action				7/13/2022	Ford
Claim	Product			9/19/2022	9/29/2022	Ford
Claim	Consumer				7/23/2021	Ford
Suit	Consumer				10/21/2021	Ford
Claim	Consumer				10/11/2021	Ford
Claim	Consumer				10/22/2021	Ford

Claim	Consumer	[redacted]			4/21/2022	Ford
Suit	Consumer				6/30/2022	Ford
Suit	Consumer				10/11/2023	Ford
Claim	Consumer				6/23/2022	Ford
Claim	Consumer				7/12/2022	Ford
Claim	Consumer				9/6/2022	Ford
Suit	Consumer				2/3/2023	Ford

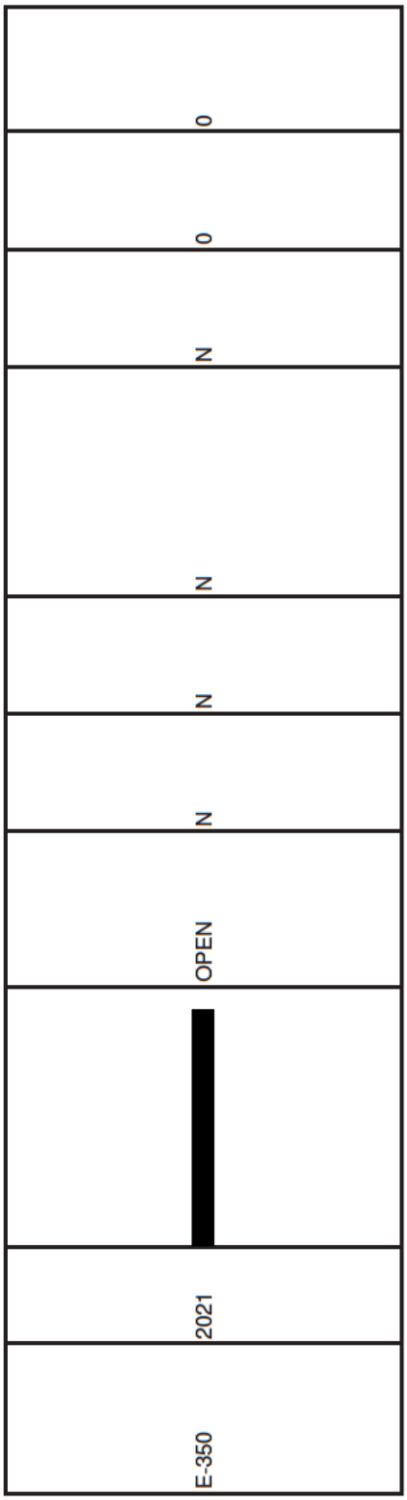
Claim	Consumer	[redacted]			11/16/2022	Ford

Claim	Consumer	[redacted]			12/7/2022	Ford

Suit	Consumer	[redacted]			3/7/2023	Ford

Model	Mdl Yr	VIN	Disposition	Alleged_Crash	Alleged_Rollover	Alleged_Property_Damage	Alleged_Fire	Alleged_Injury	Alleged_Fatalities
E-350	2022	[redacted]	OPEN	Y	N	Y	N	0	0
E-350	2021		OPEN	N	N	N	N	0	0
E-350	2021	[redacted]	OPEN	Y	N	Y	N	0	0
E-350	2021	[redacted]	CLSD	N	N	N	N	0	0
E-450	2021	[redacted]	CLSD	N	N	N	N	0	0
E-450	2022	[redacted]	CLSD	N	N	N	N	0	0
E-450	2021	[redacted]	CLSD	N	N	N	N	0	0

E-450	2022	[redacted]	CLSD	N	N	N	N	0	0
E-450	2021	[redacted]	OPEN	N	N	N	N	0	0
E-450	2022	[redacted]	OPEN	N	N	N	N	0	0
E-450	2022	[redacted]	CLSD	N	N	N	N	0	0
E-450	2022	[redacted]	CLSD	N	N	N	N	0	0
E-350	2021	[redacted]	CLSD	N	N	N	N	0	0
E-350	2022	[redacted]	OPEN	N	N	N	N	0	0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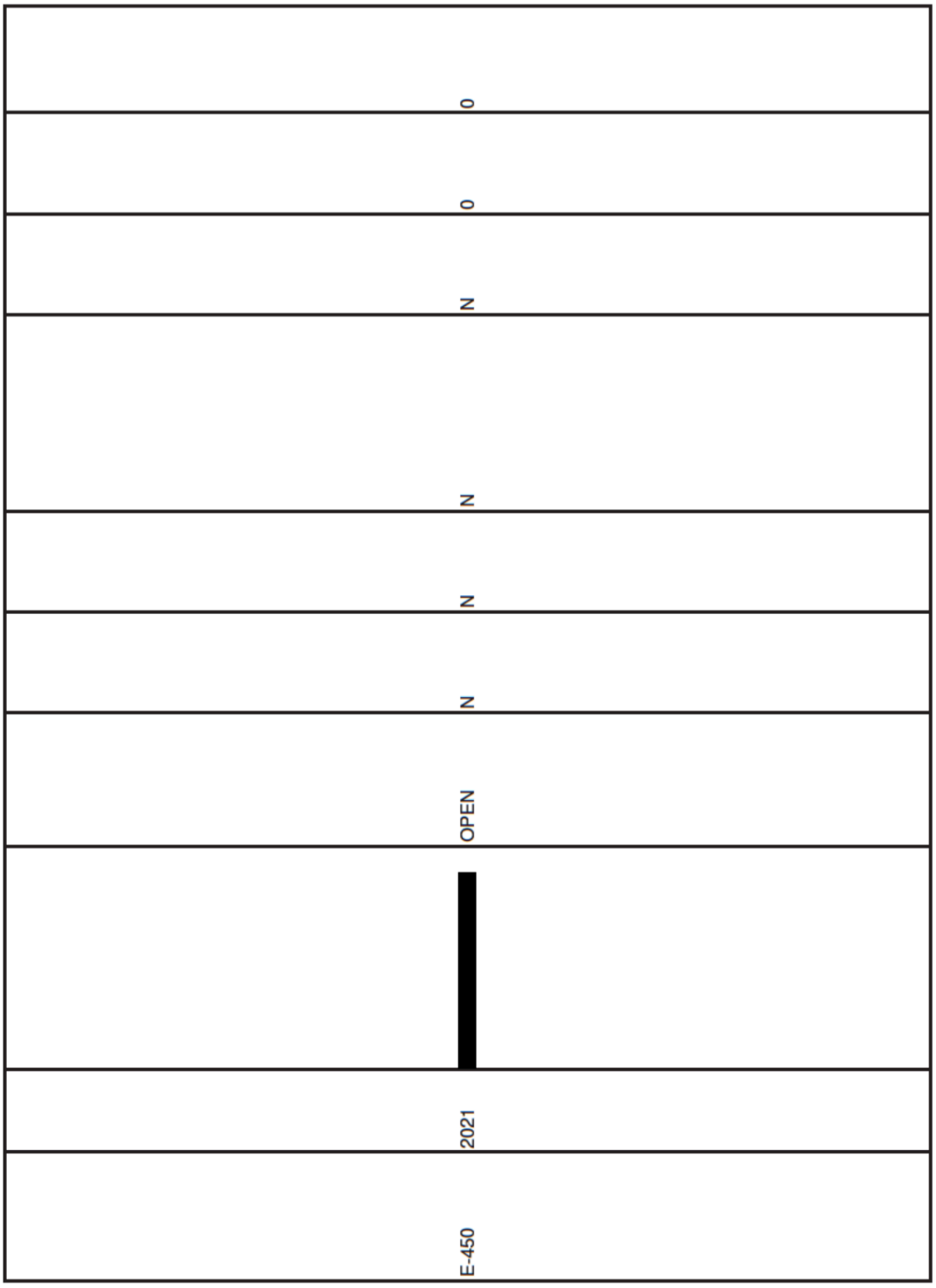
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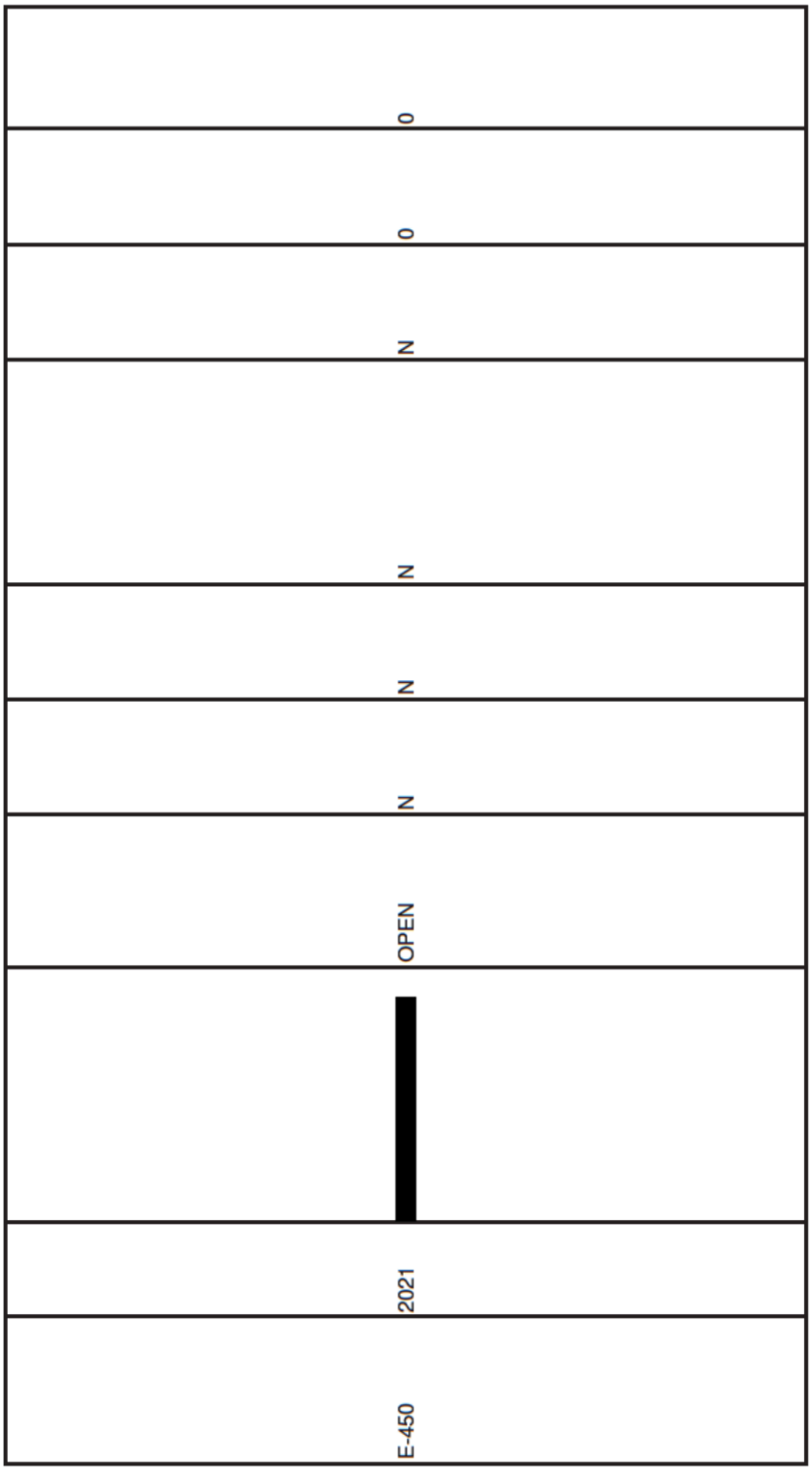
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OPEN
2021
E-450

OGC_Comments	[redacted]	Responsiveness
Vehicle accelerated on its own and brakes failed. Points to 22S08 but DAE Ballard said that would not have caused vehicle to accelerate on its own. EDR data pulled by Enterprise and no data returned. Claim denied.		B
Class action lawsuit regarding suspension cannot accommodate the stated GVWR.		C
Pressure line going to brake master cylinder came off causing loss of brakes and steering, and accident. Never received info fromd dealer. Claim being closed.		A
Per GSAR: 5x to dealer for sways/wobbles/loose steering. 1x to dealer for brake pedal soft - power steering pump supplie line separated.		C
ABS Light is on and brakes grabbing - dealer: active codes for both front wheel speed sensors. CODE C0031:29 AND C0034:29 WENT THRU PINPOINT TEST B. B1 NO, B2 YES, B3 YES, B4 YES, B5 YES, B6 YES, B7 YES, B8 YES, REMOVED AND REPLACED WHEEL SPEED SENSORS FOR EACH SIDE. CLEARED CODES AND RETESTED OK. HAD TO REMOVE WHEELS TWICE. ONCE FOR INSPECTION, AND AGAIN TO REPLACE THE SENSORS		C
Brake fluid line ruptured - dealer: VERIFY CUSTOMER CONCERN FOUND THAT HYDRO BOOST LIN TO GEAR BOX WAS BUSTED REPLACE LINE AND POWER STEERING PUMP BECAUSE LOW FLUID LEVEL AND LOW PRESSURE . TEST DROVE FOUND LINE FROM HYDRO TO PUMP WAS LEAKING AT THE QUICK CONNECTOR. REPLACE INSTALL PARTS THAT WAS REMOVE FILL TO CORRECT LEVEL TEST DROVE ALL OK AT THIS TIME REVIEWED WITH SVC MANAGER		C
Wobble in steering - NPF; ABS light - dealer: 7.3 E450 MOTORHOME 35342 VERIFY CONCERN . CONNECT IDS CHECK SERVICE CODES FOUND C0051. FOUND SSM FOR CONCERN.. SSM 49692 - 2021-2022 E-SERIES - SERVICE ADVANCE TRAC MESSAGE WITH DTC C0051 AND INOPERABLECRUISE CONTROL - BUILT ON OR BEFORE 09-MAR-2021 SOME 2021-2022 E-SERIES VEHICLES BUILT ON OR BEFORE 09-MAR-2021 MAY EXHIBIT A SERVICE ADVANCE TRAC AND PRE-COLLISION ASSIST NOT AVAILABLE MESSAGE IN THE CLUSTER WITH DIAGNOSTIC TROUBLE CODE (DTC) C0051 STORED IN THE ANTI-LOCK BRAKE SYSTEM (ABS) MODULE. CRUISE CONTROL MAY ALSO BE INOPERABLE. TO CORRECT THE CONDITION, REPROGRAM THE ABS MODULE USING THE LATEST SOFTWARE LEVEL OF THE APPROPRIATE FORD DIAGNOSTIC SCAN TOOL. FOR CLAIMING, USE CAUSAL PART NUMBER 2C215 AND APPLICABLE LABOR TIMES IN SECTION 10 OF THE SERVICE LABOR TIME STANDARDS (SLTS) MANUAL. APPLICABLE VEHICLES 2021 TRUCK: E4 ECONOLINE 2021 TRUCK: E4 ECONOLINE 2022 TRUCK: E4 ECONOLINE .... REPROGRAM ABS MODULE. UNIT WAS INSIDE BODY BUILDER SERVICE BUILDING. UNABLE TO RE-TEST DRIVE		C

Steering and brakes inop - dealer: VERIFIED CONCERN, FOUND LEAK FROM HIGH PRESSURE POWER STEERING LINE, A PRESSED FITTING ON LINE HAD SEPARATED CAUSING A LEAK IN POWER STEERING AND HYDROBOOST SYSTEM, REMOVED AND REPLACED HIGH PRESSURE POWER STEERING LINE AND REFILLED POWER STEERING FLUID RESERVOIR TO SPECIFIED LEVEL, TEST DROVE VEHICLE 6 MILES AND VERIFIED CONCERN IS NOT PRESENT AFTER REPAIRS AND STEERING SYSTEM AND BRAKING SYSTEM ARE OPERATING AS INTENDED AT THIS TIME CASUAL 3A717 22S08 recall completed	[redacted]	C
22S08 done at dealer		C
No notes in GSAR. Coded as steering wheel, feel/wander/pull, left.		C
22S08 done at dealer		C
No power steering or brakes - dealer: VERIFIED CONCERN ADDED FLUID AND INSPECTED. FOUND P/S LINE FROM HYDRO BOOST TO PUMP LEAKING AT CONNECTOR . R&R LINE OFF PUMP. BLEED P/S SYSTEM ROAD TESTED SYSTEM WORKING CORRECTLY AT THIS TIME. 22S08 done at dealer.		C
Loud noise then steering brakes didn't work - dealer: BROUGHT UNIT INSIDE SHOP AND REMOVED DAMAGED HYDRAULIC HOSE THEN REPLACED WITH NEW ONE TIGHTEN NEW HYDRO LINE AND FILLED WITH FLUID STARTED UNIT TO BLEED AIR FROM SYSTEM THEN NOTICE A SECOND LINE LEAKING REPLACED SECOND HYDRO HOSE REFILLED FLUID STARTED MOTOR WORKED AIR FROM UNIT SYSTEM THEN CLEANED LEAKED FLUID FROM ENG. AND ENG. COMPARTMENT		C
22S08 done at dealer 3x ABS light - dealer: DTC CODE U0401 INVALID DATA RECEIVED FROM PCM FOUND. DISCONNECTED PCM CONNECTOR, CLEANED CONNECTOR AND RE-CONNECTED PCM CONNECTOR. CLEARED CODE. TEST DROVE. WARNING LIGHT GONE. (2) dealer: EHICLE STARTS AND RUNS. ROAD TEST IN LOT, VERIRY WARNING LIGHTS/NO START CONDITION. SCAN - FOUND CODES U3003, P0365, P0369, P0480, P0522.P0528, P06A7, P2127, P2138. PERFROM PPT DR - DR1 Y, DR5 NO - CK R&F CLOSE B FAIL, K POWE AT SOURCE, DISCONNECT AND ISOLATE CIR - LOAD TEST- FAIL. PERFORM PPT C - C1 THRU C4 - NO. RESISTANCE HIGH, HARNESS LOOKS OK. MT TO R&I DOG HOUSE FOR ACCESS AND AIR CLEARNER TO ACCESS WIRINGACCESS AND TRACE WIRING CK BPW R CIR - SHORT TO GRND BTWN C1319C & C175 & PIN 82. DISCONNECTED ENG HARNESS AT FAN VCT CMP TO INSPECT LOOM. FOUND BARE WIRING IN AREA OF FT COVER. REPAIRED 5 CIRCUITS IN HARNESS 12C508 PER WSM. RAN SELF TEST ON AFFECTED MODULE, ALL WORKING PROPERLYAT THIS TIME; (3) dealer: CHECK FOR CODES_ALL PASS, INSPECT BELTS, ROAD TEST, NO WARNING LAMPS CAME ON		C

ABS light on - dealer: CK UNIT ABS LIGHT ON SCANNED UNIT CODE FOR RIGHT FRONT SENSOR CIRCUIT FAULT INSPECTED SENSOR AND WIRING OK REMOVED PLUG AT ABS MODULE FOUND DAMAGE AND BURNT TERMINALS AND PINS REPLACED ABS MODULE AND PROGRAMMED WITH PMI TESTED OK NO PIGTAIL AVAILABLE REPLACED ABS MODULE HARNESS REMOVED FRONT CLIP AND DRAINED COOLANT REMOVED DEGAS BOTTLE HARNESS ROUTED IN CAB TO SJB AND ROUTED BEHIND STEERING AND HYDRO BOOST BRACKETS REMOVED DASH AND REMOVED BRACKETS ROUTED WIRING AND INSTALLED DASH MOTOR HOME WIRING THROUGH HARNESS CUT AND ROUTE THROUGH PASS-THRU ON FIRE WALL ATTACHED WIRES AND SECURED MOTOR HOME WIRES TESTED OK INSTALLED ALL REMOVED COMPONENTS INSTALLED NEW ABS MODULE PMI THE MODULE TESTED OK ROAD TESTED OK MT OK BY MGR. 22S08 done at dealer		C

22S08 done at dealer 3x ABS light - dealer: VERIFIED CUSTOMER CONCERN OF TOWED IN/WONT MOVE. FOUND UPON INSPECTION ALL FOUR WHEELS LOCKED UP AND SEVERE DAMAGE TO ALL CALIPER AND BRAKE PADS, NO DTCS IN SYSTEM FOLLOWED SYMPTOM CHART FOR SYMPTOM. FURTHER INSPECTION SHOWED POWER STEERING FLUID CONTAMINATION IN ABS CONNECTOR AND IN MODULE FROM PREVIOUS LINE FAILURE/RECALL. CLEANED BOTH CONNECTORS AND REASSEMBLED. WAS ABLE TO PULL DTC C0020:49 FOLLOWED PINPOINT TEST H: H1-NO H2-YES 14.4 VOLTS H3-YES H4-YES H6-YES H7-YES H8-YES H9-YES REPLACED HCU AND ABS ASSY. REPLACED ALL FOUR CALIPERS DUE TO PISTON BOOTS MELTED AND CALIPERS STUCK. REPLACED ALL FOUR ROTORS DUE TO EXCESSIVE HEAT DAMAGE. FRONT AND REAR BRAKE PADS AND SHOES FALLING APART AND SEPARATED FROM BACKING PLATES, ALL FOUR WHEEL SPEED SENSORS MELTED. REPLACED BRAKE PADS, SHOES AND ABS WHEEL SPEED SENSORS. LEFT FRONT WHEEL BEARING SHOW EXCESSIVE HEAT AND GREASE WAS MELTED. REPLACED LF WHEEL BEARINGS. RIGHT REAR INNER TIRE ALSO BLOWN OUT DUE TO BRAKE FAILURE, REPLACED RIGHT INNER REAR TIRE. FLUSHED AND BLEED BRAKE FLUID. DURING ABS PMI KEPT GETTING DTC U2101:55 AND ADVANCE TRAC AND HILL ASSIST LIGHT. IDS SAYS PROGRAMMING SUCCESSFUL BUT STILL NOT PROGRAMMED. FOLLOWED PINPOINT TEST Z: Z1-NO Z2-N0 Z4-YES Z5-YES Z7-YES Z9-YES Z11-YES INSTALLED ABS MODULE PER PINPOINT TEST. AGAIN DURING PMI IDS SAYS SUCCESSFUL BUT STILL HAVE U2101:55 AND ADVANCE TRAC AND HILL ASSIST START. CONTACTED FSE AND WAS INSTRUCTED TO CONTACT HOTLINE FOR CONCERN. HOTLINE RESOLVED ISSUE WITH UPDATED AS BUILT DATA. PERFORMED PMI AND PROGRAMMING SUCCESSFUL AND NO LIGHTS ON. PERFORMED ROAD TEST AND VAN HAS RANDOM ABS EVENTS AND DTCS. FOUND WIRING HARNESS IS DAMAGED INTERNALLY FROM POWER STEERING FLUID. REPLACED HARNESS AND PERFORMED ROAD TEST AGAIN. THIS TIME NO ABS EVENTS OR DTC. VAN STOPS AS INTENDED. RETEST OKAY. STARS-002162153 Dealer: VERIFIED CUSTOMER CONCERN OF TOWED IN/WONT MOVE. FOUND UPON INSPECTION ALL FOUR WHEELS LOCKED UP AND SEVERE DAMAGE TO ALL CALIPER AND BRAKE PADS, NO DTCS IN SYSTEM FOLLOWED SYMPTOM CHART FOR SYMPTOM. FURTHER INSPECTION SHOWED POWER STEERING FLUID CONTAMINATION IN ABS CONNECTOR AND IN MODULE FROM PREVIOUS LINE FAILURE/RECALL. CLEANED BOTH CONNECTORS AND REASSEMBLED. WAS ABLE TO PULL DTC C0020:49 FOLLOWED PINPOINT		C

2x for ABS light - dealer: PERFORMED IDS TESTS AND VERIFIED ABS CMDTC CODES C-0020-16 AND C0037-68 CLEARED DTCS REMOVED L/REAR WHEEL SPEED SENSOR AND INSPECTED SENSOR END AND TONE RING - NO CONCERNS SEEN - VEHICLE HAD HISTORY U-CODES FOR LOW VOLTAGE AND COMMUNICATION, NOT PRESENT CURRENTLY ROAD TESTED MOTORHOME AND MONITORED WHEEL SPEED PIDS AND VERIFIED ALL FOUR MIRRORED EACH OTHER WITH NO CONCERNS SEEN CAN NOT DUPLICATE CONCERN AT THIS TIME Dealer: ROAD TESTED AND VERIFIED CONCERN - PERFORMED IDS TESTS AND VERIFIED DTC C-0037:38 PERFORMED PINPOINT TEST B PPT B1 VERIFIED DTC C-0037:38 IS PRESENT NOT THE ONES LISTED IN THIS TEST PPT B2 - VERIFIED CORRECT TIRE SIZES AND INFLATION PER VC LABEL PPT B3 - VERIFIED NO VISUAL CONCERNS WITH SENSOR AND WIRING PPT B4 - VERIFIED PROPERLY MOUNTED SENSOR ASSY. PPT B5 - REMOVED HUB/ROTOR TO INSPECT ENCODER RING - REMOVED CHROME AFTERMARKET WHEEL COVER,DRWS,CALIPER AND HOLDER ASSY. PPT B6 - TEST OHMS BETWEEN C440-1 TO C135-35 AND C440-2 AND C135-18 VERIFIED 0.8 OHMS OK PPT B7 - VERIFIED DTC C0037:38 IS INTERM AND CAME BACK ON AFTER SEVERAL ROAD TESTS - PPT B8 -VERIFIED NO VISUAL CONCERNS WITH ABS MODULE -INSTRUCTED TO REPLACE WSS REPLACED L/REAR WHEEL SPEED SENSOR ASSY. - ROAD TESTED AND VERIFIED INTERM ERRACTIC SIGNAL FROM L/REAR SPEED SENSOR REMOVED AND INSTALLED CHROME AFTERMARKET WHEEL COVER,DRWS,CALIPER AND HOLDER AND HUB AND ROTOR ASSY. REPLACED ABS ENCODER RING - STAMPED STEEL TYPE - REPLACED 1 SEAL AND GASKET- REFILLED GEAR OIL LEVEL COMPLETELY REASSEMBLED AND ROAD TESTED - OK RETESTED PASSED NO DTCS PRESENT OR PENDING -C1 ABS LIGHT ON,C2 SIGNAL INTERFERENCE,C3 ENCODER/WSS 22S08 done at dealer		C